



## Carnegie Mellon University

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### “Let’s See How Far We Can Go”

■ Piper Staff

With 16 months still to go in Carnegie Mellon’s Inspire Innovation campaign, CMU has crossed the \$1 billion milestone. But the campaign is not over yet.

“The success of Inspire Innovation is a testament to the loyalty and generosity of our alumni, faculty, staff, parents, students and friends,” said University President Jared L. Cohon. “They believe in us deeply, and they’ve demonstrated it through their support of the campaign.”

Cohon sent an email to the university community in mid-February to share the news.

“Reaching this milestone early is impressive, especially when you consider that the public launch of the campaign in

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## \$1 BILLION & COUNTING



### Music School Celebrates 100 Years

#### Concerts To Be Held in NYC, Pittsburgh

■ Heidi Opdyke

About 200 student performers and distinguished alumni spanning six decades will appear in concerts celebrating the School of Music’s 100th anniversary.

The concerts, which will be played March 31 at the Benedum Center in Pittsburgh, and April 2 at Carnegie Hall in New York City, will feature Schumann’s “Konzertstück for Four Horns.” The four parts will be played by the New York Philharmonic’s Howard Wall (BFA ’72), San Antonio Opera’s principal horn Peter Rubins (BFA ’86), CMU faculty

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### Presidential Search Committee Named

■ Piper Staff

The search for a successor to President Jared L. Cohon officially began Feb. 17, when CMU Chairman of the Board Ray Lane announced the membership of a 17-member search committee.

Chaired by Trustee James E. Rohr, chairman and CEO of PNC Financial Services Group and chair of the board’s Nominating and Governance Committee, the diverse committee is comprised of nine trustees and eight faculty members representing all seven schools and colleges.

The trustee members are:

- Andress Appolon (CMU ’02), founder and president, Appolon Strategies LLC;
- John Bertucci (CIT ’63; Tepper ’65), chairman, MKS Instruments, Inc.;
- Howard Ellin (Dietrich College ’85), partner, Skadden Arps Slate Meagher and Flom;

- Edward Frank (SCS ’85), vice president, Apple, Inc.;
- Larry Jennings, Jr. (MCS ’84; Tepper ’87), senior managing director, ValStone Partners;
- Juliet Lea Hillman Simonds;
- Manoj Singh (Tepper ’76), global managing partner, Operations, Deloitte; and
- Paula Wagner (CFA), producer/owner, Chestnut Ridge Productions

The faculty members are:

- Anthony Rollett, professor, Department of Materials Science and Engineering, College of Engineering, chair, Faculty Senate, chair, Faculty Committee;
- Irene Fonseca, professor, Department of Mathematics, Mellon College of Science;

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# Health Care Cost Institute To Share Data From 5 Billion Claims

■ Ken Walters

*Martin Gaynor, the E.J. Barone Professor of Economics and Health Policy at the Heinz College, focuses his research on competition in health care markets and on the role of incentive structures within health care.*

*Gaynor is the chairman of the governing board of the recently launched Health Care Cost Institute, an unprecedented health research initiative that will allow researchers and policymakers access to a comprehensive collection of health plan and government payer data to offer new insights into health care costs, utilization and intensity.*

## What is the Health Care Cost Institute?

It's a new independent, non-profit, non-partisan entity, dedicated to improving the state of knowledge about health care costs and utilization in the United States.

Our major data sources initially come from large private insurance companies. About two-thirds of all Americans are privately insured, and up to this point, there hasn't been really good complete systematic information about them. Up until now most information comes from the Medicare program, and while that is clearly very important that's only part of the picture.

Our goal is to complete that picture and get information to the general public, policymakers and industry participants that will allow for better decisions and better policy to be made.

## How will you accomplish this?

We see ourselves as engaging, roughly speaking, in two major activities.

One is what we're calling scorecards that we will publish on a biannual basis to provide summary information on what's happening with health care costs for the population that we have in our data. We can break those down

into how much of cost increases are due to changes in utilization, prices and intensity of service. We also can look at specific kinds of treatments or diseases and at different regions of the country. So there's a lot of things we can do to get a better sense of what some of the drivers of health care costs are and where the changes are coming from.

We also want to put the data behind the scorecards online in a user-friendly interface. So anyone who is interested can get a look at the slices of data that are of particular interest to them.

## I understand you're working with more than five billion medical claims. How do you make sense of the enormous amount of information?

It's a very large undertaking. There are some challenges. One is that the datasets are so large. But with advances in computing, there are methods to handle large databases. A little more forbidding is that the data are complex, and there definitely will be a lot we'll have to learn.

Initially we want to focus on the scorecards, which will be fairly aggregate kinds of analyses, dedicated to exhibiting patterns in the data.

The other set of activities we will be engaging in is making the data available to researchers. To start we have a small set of projects. These projects will accomplish two goals. First, they will generate new knowledge about health care costs. Second, they will help us understand the data better. They will inevitably find what does or doesn't work, where there are things that are clear or if there are certain problems associated with the data. Our goal is ultimately to have a nice, clean, uniform database that we make publicly available for non-commercial, non-partisan scientific research.

## What impact will this information have?

There will be findings from work done on these data that will be of benefit to policymakers, insurers and providers. Generating information on the drivers of costs will help us hone in on key elements to address in trying to improve the functioning of the health care system.

For example, I imagine we could try to identify high performing providers versus those that are not performing at such a high level. Then we could try and understand what it is that's driving the high performers, what are they doing? Is there something special or unique, or are there things they are doing that could be used successfully by other organizations? That's something that could benefit everybody if we could get higher performance in the health system.



MARTIN GAYNOR

It could be relevant to government, to the providers themselves, to private payers, to insurance companies.

## That brings us right to health care competition. How important is it for an area to have a competitive health care base?

I think it's quite important. It's an area of health policy that hasn't received as much attention as some other areas like expanding insurance coverage, or improving the quality of care, or malpractice. Those are all vital areas. But folks in health policy haven't paid too much attention to competition. In my view, that's a mistake. We have a system in which we rely on markets to produce and deliver health care. That's true not only in the U.S., but increasingly in other countries, as they reform their health systems. England, the Netherlands, and many other countries are decentralizing their health systems and trying to encourage choice and competition.

About half of all the dollars of health care financing are private dollars as opposed to public. So we rely on markets there to a great extent. And if the markets aren't working properly, then we are not going to get the outcomes that we want. What do we want? We want better care; we want lower costs; we want more convenience; better quality of service. That's what everybody wants.

The problem is that, in health care markets, there's been a lot of consolidation. A lot of these markets are not working as well as they should.

The institute can help to shed some light on that, because we all have information on what's happening, again with these privately insured people, who are two-thirds of the markets, and we'll see what's happening for them with regard to where they go, the kinds of quality of care they get, the prices they paid for the services they receive.

The last thing I should mention also is that, it's not just folks with private insurance who are affected by this.

Medicare regulates the prices they pay to hospitals and doctors. But there have been quite a few studies establishing that quality of care, for Medicare beneficiaries, is substantially lower in places where there's not a lot of market competition. That also is true in places like England — patients that go to hospitals facing less competition are at substantially higher risk for worse medical outcomes.

## When you look at the nation's health care system, where do you think it's going?

We are not heading in a good direction, which folks have been saying for quite some time. On the public side, we are on an unsustainable path. Public spending on medical benefits over the past 20, 30 years has grown about 2.3 times faster than national income. So we are spending money on health care faster than is our ability to pay for it.

On the private side, again, the concern in general is that while health care spending is valuable and has been increasing in value, it's been increasing so fast that some of the spending is crowding other priorities. We spend money on some things that are fairly low cost and do a lot of good, like aspirin for heart patients. However, we also spend a great deal of money on things that have no proven medical benefit, like proton beam therapy for prostate cancer.

Proton beam therapy involves building a cyclotron and associated equipment the size of a football field at a cost of \$120 million. Medicare pays about \$1,400 per treatment for this, the typical man needs about 20 treatments (\$28,000), and we have no idea whether this treatment works or not. To put this in perspective, if we give a Medicare beneficiary on 3-4 of these treatments, we could have paid for insurance coverage for one person without it.

This is the problem — paying for things that are very costly, but whose benefits are less than their costs.



## the PIPER

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

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# “Let’s See How Far We Can Go”

CONTINUED FROM PAGE ONE

October 2008 coincided with the beginning of one of the worst global economic recessions in history,” Cohon said. “Our accomplishment is a testament to the university’s rising reputation, increasing global visibility and the loyalty of alumni, parents, faculty, staff, students, friends, corporations and foundations that have given Carnegie Mellon their support. They find our vision and objectives compelling. They believe in us, our university, and know they are investing in a place that impacts the world.”

Despite the economic climate, more than 44,500 donors have made a gift to the university so far during Inspire Innovation.

Increased engagement by alumni, parents and friends, as well as students, faculty and staff also has been a focus of the campaign.

“We’ve seen alumni embrace the concept of alma mater through their active participation in events and activities,” Cohon wrote. “The number of our alumni chapters has grown to 73, including 23 international chapters.”

The impact of the campaign is already being felt on campus. Two donors have stepped forward to provide naming gifts to two of CMU’s seven schools — the David A. Tepper School of Business and the Marianna Brown Dietrich College of Humanities and Social Sciences — and a third donor supported the transformation of the H. John Heinz III School of Public Policy and Management to the H. John Heinz III College. Twenty-four endowed professorships, 73 endowed graduate student fellowships and 190 endowed undergraduate scholarships have been created thus far.

President Cohon also noted that the campaign has raised support for key academic areas such as energy and the environment, and brain science, and it has helped to improve the Pittsburgh campus. Capital funds were raised for the Gates Center for

Computer Science, the Hillman Center for Future-Generation Technologies, the Kraus Campo, renovations to laboratories in Doherty Hall and other facility improvements.

“This is a great day for the Carnegie Mellon community,” said Campaign Chair Edward H. Frank (S’85), a life trustee and parent of a 2006 graduate. “As an alumnus and a parent, it is especially gratifying to see so many people contribute to our success. Of course, there is still more work to be done as we look to expand support for our students and faculty and attract the best minds to our university. Our strategy includes ongoing philanthropy and working hard to contain costs.”

“While crossing the \$1 billion mark is significant, and it does help the university on its current trajectory of excellence, it does not insulate us entirely from the operating costs of successfully preparing our students for today’s global workplace,” Cohon wrote. “That is why we will continue to press on in true Carnegie Mellon fashion through June 2013, and why it’s not too late for anyone to become part of our campaign’s success.”

Cohon said more resources are greatly needed for student financial aid, to recruit and retain award-winning faculty, to support emerging research opportunities and for new facilities.

CMU’s 2012 master plan includes a new bio-energy and nanotechnology building, which will house the Biomedical Engineering Department and the Energy Futures Institute; a new home for the Tepper School on the current Morewood parking lot site; renovations to Skibo Gym; and an addition that will house a new fitness area in the University Center.

“Together, let’s see how far we can go from here,” Cohon wrote.

## INSPIRE INNOVATION CAMPAIGN FACTS

Campaign publicly launched: October 2008  
Campaign close date: June 30, 2013

Progress as of February 15, 2012 . . . . . **\$1.01 billion**  
(**\$530.6 million endowed**)  
Number of contributions made . . . . . **199,354 gifts**  
during Inspire Innovation . . . . . **from 44,549 donors**

### Core Campaign Goals:

(Dollars in millions)

#### Supporting a New Generation

of Student Innovators . . . . . **\$170.4**

Includes:

- New endowed scholarships . . . . . 190
- Scholarship funding . . . . . \$82.6
- New endowed fellowships . . . . . 73
- Fellowship funding . . . . . \$71

Retaining and Enhancing Faculty . . . . . **\$341**

Includes:

- New endowed professorships . . . . . 24
- Professorship funding . . . . . \$83.3
- Faculty research funding . . . . . \$257.7

Sustaining CMU’s Foundation of Excellence . . . . **\$413.1**

Enhancing an Innovative Environment . . . . . **\$78.3**

Includes:

- Construction of the Gates and Hillman Centers . . \$41
- Other renovations and updates  
(academic buildings, labs, athletic, fitness,  
campus beautification) . . . . . \$37.3

Undesignated . . . . . **\$10.8**

### Noteworthy:

Two donors provided naming gifts for colleges during Inspire Innovation:

- David A. Tepper School of Business
- Marianna Brown Dietrich College of Humanities and Social Sciences

Donor support enabled the transformation of the H. John Heinz III School of Public Policy and Management to the H. John Heinz III College

Amount raised during previous Centennial Campaign (July 1994 – December 2000) . . . . . \$410.2

## Why Give? Donors Explain

University Advancement’s Love a Donor Week annually celebrates and thanks those who give monetarily to support Carnegie Mellon.

More than 2,200 thank you notes — the most in the event’s three-year history — were penned by students, faculty and staff Feb. 13-17 at various tables across campus and mailed to donors.

Nearly 150 faculty and staff donors were treated to a lunch in the Connan Room, where the Piper spoke to a few donors to find out what compels them to contribute. Here’s what they had to say:

**Adam Rauf**, administrative assistant II, Business Operations, Software Engineering Institute, and president of Staff Council

“Carnegie Mellon has permeated my entire life. Even before I started working here I was always a fan of all of the arts events. . . . When I became a member of CMU it was hard to not want to give back to an organization that tends to push new boundaries for the city in general and the world.”

**Sylvia Berry**, assistant business manager, School of Computer Science  
“I love Carnegie Mellon. It’s one of the best places. I initially started giving because of Nico Haberman, who was the head of the School of Computing, as computer science was called at the time. He passed away, and they had a fund in his name so I started giving because of that. I continued giving because I love Carnegie Mellon.”

**Ron Placone**, assistant vice president for Human Resources  
“I think you’re investing in the world’s future. I can’t think of a better place to donate money than Carnegie Mellon, and I get to see first-hand all of the wonderful things done. So for me, it’s a no-brainer.”

**Erika Linke**, associate dean of University Libraries  
“The reason I give to Carnegie Mellon is much like Ron [Placone] said: Thinking about the future and being a part of something bigger than yourself.”



**Lisa Krieg**, director of Enrollment Services

“I believe it is the right thing to give back to an educational institution. I give to all the places where I attended. I’ve always given at the universities where I work. It just feels like the right thing to do. . . . We’re so lucky to work at such a great institution.”

**Gary Fedder**, professor of electrical and computer engineering and robotics, director of the Institute for Complex Engineered Systems (ICES)

“I love Carnegie Mellon. It’s a great place to work. It does a lot for everyone, students, faculty, staff and I feel blessed to be here.”

**Asim Smailagic**, research professor, ICES

“I would like to see this university progressing in even more intensive research and getting my colleagues and other faculty members to contribute. To

contribute to students, to colleges, to education — it’s beneficial to all of us.”

**Jay Morano**, director of Trademark Licensing

“The university has given me so much. You can’t put a price tag on it. Carnegie Mellon is a great place to work.”

**Holly Hippensteel**, assistant dean of Student Affairs

“I think it’s expected that we give our time and energy to our work . . . it may not necessarily be expected that we give financially. But I see it as my good faith gesture in my belief in the place and that we value it as an institution. And I think it’s important to say . . .

I’m willing to put my money on the line for this as well. . . . I’ve benefitted so much from this institution, personally and professionally, that it’s the least that I could do to give back.”

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# Music Celebrates 100 Years

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member William Caballero (principal horn, Pittsburgh Symphony Orchestra), and Brice Andrus (principal horn, Atlanta Symphony).

Chicago Symphony's principal horn Dale Clevenger (BFA '62) will conduct the piece.

"The Schumann Konzertstück is a difficult and unique piece because it was written at a time when the horn was evolving," Wall said.

"When it was created in 1849, the addition of valves allowed a broader range of notes without having to insert different lengths of tubing depending on the music's key signature.

"With this new capability for the horn, Schumann decided to push the envelope by writing a piece which would explore the possibilities of the new horns. On top of that he decided to write a concert piece for not just one horn but a whole section of four horns. It was pretty rare to write a concerto for four of the same kind of instrument," Wall said.

One thing all of the visiting performers have in common is that they studied at some point with former university horn professor Forrest Standley.

Standley, the principal horn for the Pittsburgh Symphony from 1949-1959, taught at the university for 37 years until his death in 1986.

"Forrest Standley was considered a good teacher, because many of his

students got orchestra positions," Wall said. "While not everyone who studied with him got a job in an orchestra, if you did what he said, you would become the best horn player you could be. But it was up to you to follow his instructions. He was soft spoken and not demonstrative.

"He didn't really want you to speak during a lesson unless he asked you a question and he mostly didn't want questions from his students. He figured he was covering and explaining everything you needed to know. This seemed to work out pretty well."

Rubins, a member of the San Antonio Symphony and principal horn with the San Antonio Opera, attended Carnegie Mellon to study with Standley.

"His willpower is something I've never seen since," Rubins said. "You could see that he was dealing with medical issues, but he was still playing up until the time of his passing.... His standards were extremely high, but we knew that if we did the things that he suggested, it would go a little bit easier for us in the workplace."

While not a graduate of CMU, Andrus traveled to Pittsburgh about four times a year to take lessons with Standley after getting into the Atlanta Symphony.

This has been a banner year for horn players at Carnegie Mellon. Clevenger was awarded an Alumni Distinguished Achievement Award and delivered a

## CITY RECOGNIZES SCHOOL OF MUSIC

Pittsburgh's City Council celebrated the School of Music with a proclamation declaring Feb. 28, 2012, as "The Carnegie Mellon School of Music Day." The event recognized the 100th anniversary of the School of Music (<http://music.cmu.edu/centennial/>).

The proclamation noted the school's legacy of education and performance.

For example in Pittsburgh, some 22 members of the Pittsburgh Symphony Orchestra are Carnegie Mellon graduates and faculty members, as are members of the Pittsburgh Opera, the Opera Theatre of Pittsburgh, the Bach Choir of Pittsburgh and the Mendelssohn Choir of Pittsburgh. The school's internationally recognized programs in eurhythmics and solfège also are celebrated.

The School of Music's Starling Quartet, an honors string quartet founded in 2002, performed at the proclamation celebration.

heartfelt lecture in which he said that art pays dividends for those who participate in it.

"The world wants to see baseball and football more than an opera, but a symphony concert can change lives," he said during his talk.

The Pittsburgh concert also will be broadcast live by Pittsburgh radio station WQED-FM (89.3).

### Featured Performers

Other alumni who are coming back for the concert are opera singers Jeffrey Behrens (BFA '03), Liam Bonner (BFA '03), and musical theater performers Graham Fenton (BFA '05), Lisa Vroman (MFA '81) and Christiane Noll (BFA '90).

Fenton stars in "Jersey Boys." Vroman starred in the Broadway

production of "The Phantom of the Opera" as Christine Daae. Noll was nominated for a Tony Award and Drama Desk Award for her portrayal of Mother in the Kennedy Center Revival of "Ragtime."

Violinist Emma Steele (A '12), the Sibelius International Violin Competition finalist and student of Cyrus Forough, also will play.

Manu Narayan (BFA '96), screen actor/vocalist, will be the master of ceremonies for both concerts.

### Ticket information

For more information and to purchase tickets for both performances: <http://music.cmu.edu/centennial/>. The site also includes information about a patron event in Pittsburgh with pre-concert cocktails, dinner, concert and dessert.

## Love a Donor

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**M. Shernell Smith**, coordinator of Student Development, Office of Student Affairs

"I think it's important to be a role model for our students. ... I feel like this is a place where we talk about our heart being in the work. ... So when I see student initiatives, and projects that are service learning or traveling abroad or that are cultural or multicultural events, I know that sometimes there's a little extra that we can give. So it's important for me as someone who advises certain student organizations, like Habitat for Humanity, to ensure that I'm doing a little bit extra ... to be a really great role model."

**Sarah Belousov**, project manager, TechBridgeWorld, Robotics Institute  
"I think Carnegie Mellon is an outstanding institution, not only an educational leader around the world, but also as a nonprofit organization. ... Carnegie Mellon is certainly one of those outstanding groups that is making a difference around the world. I am a donor to TechBridgeWorld as well. And I think that what we're doing, and what other groups around the university are doing, both here in the U.S. and also other parts of the world, is exciting."

**Alice Bright**, serials librarian, University Libraries

"I'm a third-generation alum. My father and my grandfather went here as undergraduates, and my grandfather was the registrar here for a time. I just had such a wonderful time as an undergraduate, and my closest friends are women that I met as a freshman. I've just enjoyed working here."

**Chris Nolin**, senior project manager, Computing Services

"Being an alum and a staff member I feel like this is such a strong community, that it really goes back to Andrew Carnegie and 'my heart is in the work.' I feel like I contribute my job but I also contribute financially to the ongoing success of all of the students. There are great kids here, and I want to keep it going for my own children and others, too. I love this place."

**Patty Stragar**, fitness operations manager, Department of Athletics  
"I love Carnegie Mellon. It's a great place to work. I'm not only an employee but also a parent so I want to give back to the university for myself and for my children. I donate to the Athletic Department. I just wish that everybody would give something. Because even if it's just a little, it all adds up."



ANDREW BOVA (A '11, '12) WRITES A THANK YOU LETTER TO DONORS.

**Madelyn Miller**, director of Environmental Health & Safety  
"I feel like this university has become part of my family. ... I love so much what this university is about that I feel like donating is a very important part of my life."

**Don Coffelt**, director of Facilities Management Services  
"The university has given so much to me. Aside from working here, my son graduated from here, and I graduated from here, and so it's sort of like paying back this incredible debt one little bit at a time."

**Mark Dorgan**, executive director of major gifts, University Advancement  
"I felt that I needed to support the university because of everything that's going

on here and what the university has done for me and my career. And I'm happy to support a variety of programs on campus. It's a privilege to do that and to work here. ... It's important for me to lead and set an example."

**Ermine Teves**, project assistant, Robotics Institute  
"I choose to donate because ... I'm CMU all through. I did my undergrad here, I'm working here now, and I'm doing my master's. CMU has given me a lot. I'm really happy to give back."

To make your donation for 2012, go to [www.cmu.edu/give](http://www.cmu.edu/give).

# Authors' Work Fosters Design Methods

■ Heidi Opdyke

It was a perfect blend of design ideas.

Bella Martin (MDes'04) wanted a way to help companies embrace the power of human-centered research. Bruce Hanington studies how different methods work.

Their complementary approaches resulted in “Universal Methods of Design: 100 Ways To Research Complex Problems, Develop Innovative Ideas, and Design Effective Solutions” (Rockport Publishers).

While attending Carnegie Mellon, Martin structured her thesis work around visualizing ways to help designers win arguments with companies where human-centered research was not yet a consistent part of the culture. Hanington, associate professor and director of graduate studies for the School of Design, was her adviser.

“Designers should involve users in the whole process of research, from understanding them before they design, to designing with them as they design, and getting meaningful feedback from them when they’ve prototyped and have designs to evaluate,” Hanington said.

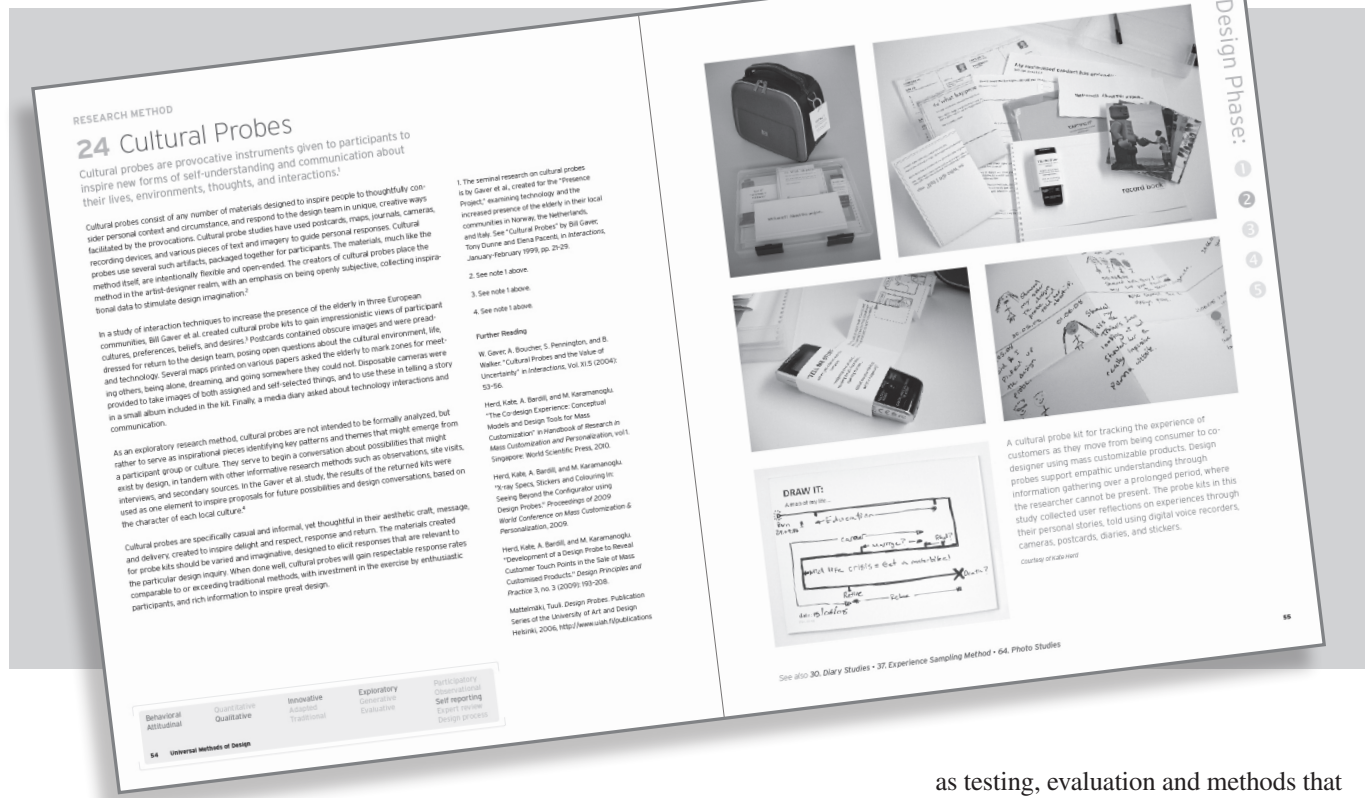
Eight years later, the two took their original work and expanded it into the book. “Universal Methods of Design” is now the sixth in a series by Rockport Publishers; with the first book being one of Martin’s and Hanington’s favorites: “Universal Principles of Design” by Will Lidwell, Kritina Holden and Jill Butler. Following the series format, “Universal Methods of Design” offers 100 examples of design processes including case studies and illustrations from industry and research. A number of them are from School of Design and Human-Computer Interaction Institute faculty, students and alumni, and from companies such as Microsoft, eBay, Citrix, Adaptive Path and MAYA.

Martin said the real-world examples used on every page of the book were picked because her thesis found evidence that visuals and case studies help to demystify what designers do.

“The book is for designers who create products and services: very experienced designers who know 75 user research methods will hopefully learn 25 new ones, and we hope that design students will come to see the methods as the tools for our discipline, just as sketching and software are our tools,” Martin said. “I also hope it will end up on client, product manager and developer bookshelves — the book really was designed with them in mind, too.”

Hanington said the book is widely adaptable for designers in a variety of ways, and the examples from product, interface, communication and environmental design speak to that.

Martin added: “I hope that people who are not designers — or new to user-centered design — will look at the



methods and think, ‘Oh wow, that’s all it is? Our team can do that.’”

“There are some design professions where it’s less common to see these methods in practice. It’s more common in interaction design and industrial design, but it’s gaining a lot of inroads in communication design, graphic design and architecture, and the methods are equally powerful there,” he said.

Carnegie Mellon’s School of Design has a long history with a well-grounded reputation in human-centered design. Hanington teaches a research methods course for first-year graduate students and an undergraduate human-centered design course called “How People Work.”

“We felt that the book itself is very human-centered because it’s well laid out, and designed to be accessible — both in terms of how you find the information but also in the way that it’s communicated and conveyed,” Hanington said. “I also think that using the visual case studies goes a long way in communicating the methods, because that’s how designers are used to looking at things.”

Martin, now working as a senior interaction design consultant at Delta Airlines in Atlanta, said she is ever thankful for her professors at the School of Design and HCII. She said the book was partially born from her hopes to work with them again.

“I am always amazed at the doors that open when I say ‘I’m a designer and researcher with a master’s from Carnegie Mellon,’” Martin said. “It is amazing what power those words have. It is also a great feeling to know how to deliver on those words, as I am confident in what I learned there and still deeply identify with the philosophy of the program.”

“The thing that worked out as a very nice balance between me and Bella is that I’m much more versed and comfortable writing about those early

upfront, more qualitative methods that take place in user qualitative studies, design ethnography and exploratory research through to participatory design and co-design,” Hanington said. “Bella is much more experienced in practice, and well versed in the later stages such

as testing, evaluation and methods that go all the way through the launch and monitor of a product.” It was this type of synergy that brought the authors, and ultimately this book, together.

“Universal Methods of Design” is available from Rockport Publishers and is online at Amazon and Barnes and Noble.

## iPad Programming

### Course Extends Learning Opportunity To Thousands Through iTunesU

■ Piper Staff

The students sitting in lectures at CMU for a new iPad programming course are just the very tip of the iceberg.

“Developing iPad Applications for Visualization and Insight” has proved popular with students from across the university and the world. About 90 students showed up for the first day of class though the course had enrolled its limit of 30. And more than 20,000 subscribers are watching class lectures for free at Carnegie Mellon on iTunes U.

“The response has been tremendous and we’re really excited to be seeing these numbers,” said Niki Kittur, an assistant professor at the Human-Computer Interaction Institute who is co-teaching the course. “I think one big draw of our course is that it gives people not only the practical skills in building iPad applications, but also the conceptual tools to envision new ways of interacting with information.”

In addition to Kittur, a team of top industry iOS developers, led by Paul Hanks Drielsma, are using the project-based course to teach students about the design and implementation of iPad applications that help users visualize and make sense of large data sets.

Kittur said with the new iTunes U structure the team is able to put pretty much the entire class online — not only HD video of lectures, but also the assignments and readings — so that

people can get very close to the real class experience, but follow along at their own pace on the Web.

Students are learning a basic background in visualization and in understanding the cognitive processes involved in transforming visual representations into mental representations, insight and discovery, and instruction on implementing these techniques in real applications for the iPad.

“We’re not only teaching students how to program,” Kittur explained, “but what they should be programming. We want to think of new, user-centered ways for people to consume information and then implement those on an iPad.”

Kittur added, “The idea is that we can help students not just understand how to program but also what to program: how to develop iPad apps that take information and turn it into knowledge and insight.”

The software engineering topics taught focus on the latest technologies available in the newly released iOS 5.

For those interested in following along, object-oriented programming experience is recommended.

“Right now we have interested students from all over the school — from computer science to HCI to design to electrical engineering; I think this is a really popular area now,” Kittur said.

Watch the course on iTunes U or on any iOS device with the free iTunes U app.

## Improving Safety

### DOT Awards CMU, Penn \$3.5M Grant

■ Chriss Swaney

The U.S. Department of Transportation has awarded Carnegie Mellon's College of Engineering and the University of Pennsylvania's School of Engineering and Applied Science a \$3.5 million grant for the next two years to conduct research and implement technologies for improving the safety and efficiency of transportation.

Through this new University Transportation Center (UTC), Carnegie Mellon and Penn will explore cutting-edge technologies that could influence everything from the safety of vehicles and roads to the analysis of traffic flow. The consortium will establish a workforce development program to train graduate students in modern transportation-related technologies and policymaking.

This Carnegie Mellon/Penn UTC for Technologies for Safe and Efficient Transportation, or T-SET UTC, a Tier 1 National Center, will be located at Carnegie Mellon in Pittsburgh.

Raj Rajkumar, the George Westinghouse Professor of Electrical and Computer Engineering and Robotics at Carnegie Mellon, will serve as the director of the new UTC.

Research in the areas of vehicular information technologies, autonomous vehicles, enhancements for safer driving and the development of novel human-vehicle interactions without overloading the driver will be a large part of the center's work. Technology deployment, collaboration and diversity of the technical workforce will also be key goals of the center.

At Carnegie Mellon, the new center also will engage work under way by Traffic 21, a multidisciplinary research team working to design and deploy information and communications for improving safer and more economic transportation solutions that could ultimately save more than 30,000 lives lost each year in traffic accidents.

## Tasty History Lesson Served

■ Shilo Rea

Michael W. Twitty, served up okra soup, black-eyed peas and leafy greens with a side of history.

In his talk, "More Than Slave Food: The African Roots of American Foodways," the culinary historian discussed food's critical role in the development and definition of African-American civilization and the politics of consumption and cultural ownership.

He became interested in culinary history after a childhood visit to Colonial Williamsburg. "I liked how they recreated history," Twitty said. "When you cook, you're not just throwing something together — it's an art. There's an incredible body of knowledge."

His study of foodways focuses on how people relate to food and how people cultivate between food, philosophy, culture and society.

"Everybody has to eat, and food is all about politics and power," said Twitty, who is also a writer, historic interpreter and Jewish educator. "These main issues have driven the identity of African-Americans. They came from slavery, which was all about power.



PHOTO BY TIM KAULEN  
PROFESSOR TIM HAGGERTY, CULINARY HISTORIAN MICHAEL TWITTY, PROFESSOR EDDA FIELDS-BLACK AND M. SHERNELL SMITH, COORDINATOR OF STUDENT DEVELOPMENT, POSE BEHIND DISHES SERVED DURING TWITTY'S RECENT UNIVERSITY LECTURE.

Food was one of the few areas of enslaved people's lives that they could try to control."

Edda Fields-Black, associate professor of history at CMU, added, "Like any other ethnic community in early America, enslaved Africans brought and blended elements of their West and West Central African food traditions in the creation of American cuisine."

Twitty prepared three dishes and audience members were invited to taste each: okra soup, the root of gumbo; chebudniebe, a black-eyed pea dish; and plasas, leafy greens served with onions and garlic.

Twitty's lecture was sponsored by CMU's University Lecture Series, Office of Student Affairs, Humanities Scholars Program and Department of History.

### HERITAGE BLACK-EYED PEAS

*Black-eyed peas, which actually are beans, are thought to have migrated from West Africa to the Southern states in the 1700s with the slave trade.*

*"The Manding people call them 'soso,' and the Wolof call them 'niebe,'" writes culinary historian Michael Twitty. "A millenia-old staple of the diet in Senegambia and its hinterlands, the black-eyed pea grows well in hot, drought-conducive conditions and is a symbol of resilience, mercy, and kindness. Niebe are the kind of cooked food one gives as sadaka — righteously given charity — to beggars on the streets of Senegal. They continue to be seen as a sign of blessing and are paired with greens as good luck food on New Year's Day."*

- 1 pound dried black-eyed peas or any cowpea
- 1 ham hock, a small piece of salt pork or slices of bacon, or smoked turkey (vegan alternative — 1/2 teaspoon of liquid smoke and 5 cups of non-meat chicken stock)
- 1 cup chopped onion
- Kosher salt, to taste
- 1 small crushed dried fish or cayenne pepper
- A few teaspoons of sorghum molasses (optional)
- 1/4 cup of fresh chopped flat-leaf parsley (optional)
- A few sprigs of fresh or dried thyme (optional)

Sort your peas, making sure you check for pebbles or bad peas. Soak the peas for several hours or overnight, or if in a rush, soak them in boiling hot water in a covered pot for an hour before cooking.

Prepare a stock of salt meat and onion and season with salt and a hot pepper. Boil these together for 15 minutes and add the soaked black-eyed peas. Add enough water to just cover. If you like you can add some molasses for more flavor, or the fresh herbs.

Gently cook for an hour and a half. Pair it with corn pone or serve with cooked long-grain or basmati rice.

Serves 4 to 6.

## INI Launches Program for Busy Executives

■ Chriss Swaney

Dealing with cyber threats has become the new norm.

As cyber criminals increasingly launch crippling attacks that hamper business and threaten security, organizations struggle to find technology savvy executives to lead strategies that protect and defend information across the enterprise.

To support strategic leadership, the Information Networking Institute (INI) will offer an Executive Master of Science in Information Assurance (ExecMSIA) Program beginning in fall

2012. Flexible to fit easily with frenetic career schedules, the ExecMSIA offers a concentration in cyber forensics and incident response (CyFIR) or resilience management. The two concentrations will be led by instructors in the CERT Program of the Software Engineering Institute. An option also is available for non-degree students to pursue certificates in these two areas.

The program is designed to help business leaders and tech experts see cybersecurity as a top priority, and to learn how to use tools like forensics to track adversaries.

"This is an interdisciplinary

program designed to meet the needs of today's fast-paced global business environment combining online sessions with periodic, short sessions on the Carnegie Mellon campus," said Dena Haritos Tsamitis, INI director and director of education, training and outreach for Carnegie Mellon CyLab.

"Students pursue the program with a cohort of about 20 peers, who add enrichment to each other's professional network and enhance learning by sharing their own knowledge that has come from experience," Tsamitis said.

The INI program runs 20 months, is made up of five semesters, and students

will spend 24 days on campus. In each semester, students will complete six hours of coursework in online recitations during 1.5-hour sessions held on four Saturdays. During those virtual, interactive sessions, students will participate in activities such as laboratory exercises, mock hearings, group meetings, case study discussions, presentations and problem-driven scenarios.

The program application deadlines are April 30 (first round) and June 30 (second round). Details on how to apply appear at: [www.ini.cmu.edu/degrees/msia/index.html](http://www.ini.cmu.edu/degrees/msia/index.html).

# International Film Festival

## Two Sundance Winners Coming to Pittsburgh

■ Shilo Rea

You don't need to go to Sundance to see the best independent films of the year.

CMU's International Film Festival is bringing two of the famed festival's 2012 winners, along with an array of other acclaimed films, to Pittsburgh.

Running March 22 through April 15 at various locations throughout the city, "Faces of Others" will use a record 20 films to explore the concept of the other — or anything that is not us.

"We searched the world to select unique, independent films that seek to understand what the other is," said Jolanta Lion, director of the film festival. "Many are top films at the Amsterdam, Cannes, Berlin and Sundance festivals, and some are still in the festival circuit, vying for recognition."

"Putin's Kiss," winner of Sundance 2012's World Cinema Cinematography Award: Documentary, is a Danish and Russian film about a 19-year-old who starts to recognize flaws in a strongly nationalistic Russian youth movement that aims to protect the country from its enemies. It will be shown twice: 7 p.m., Saturday, March 24 at Melwood Screening Room and at 7 p.m., Thursday, March 29 in CMU's McConomy Auditorium.

The 2012 Sundance winner for World Cinema Directing: Documentary, "5 Broken Cameras," will screen at CMU's McConomy Auditorium at 7 p.m., on Thursday, April 12. Directors Emad Burnat and Guy Davidi offer a first-hand look at five years of West Bank protests, effectively pairing political history with personal life.

Another highlight of the festival is the American and Dutch film "Girl with Black Balloons," from director Corinne van der Borch at 7:15 p.m., on Thursday, March 29 at the Harris Theater. Van der Borch, who will attend her film's screening, is attracted to documentary filmmaking because it allows her to keep reinventing stories.

"The most important aspect of my

filmmaking is that I believe a relationship can be seen and felt on the screen," she said. "For me, filmmaking is about telling stories from surprising angles, whether they are fictional or documentary-based. A documentary can be as entertaining and compelling as any scripted film."

"Girl with Black Balloons" is about Bettina, a woman said to be the most beautiful woman to have ever lived in the legendary Chelsea Hotel in New York City. She also is said to have hid herself away in her studio for the past 40 years. Sleeping on a lawn chair, Bettina is surrounded by boxes stacked from the floor to ceiling, all filled with a stunning body of artwork that has never seen the light of day.

"Sacrifice, obsession and devotion are the words that floated around in my head when I first learned more about Bettina," van der Borch said. "Her life as a reclusive guardian over her creativity and artwork inspires us to think about the world we have each chosen for ourselves, how we are captive of it or freed by it."

As in past festivals, each film screening will be paired with an interactive element — from appearances and Q&A sessions with the film director to local experts weighing in on the film's topics.

"Faces of Others" is sponsored by CMU's Humanities Center, The Pittsburgh Foundation, The Fine Foundation, The American Hellenic Foundation of Western Pennsylvania, PNC Bank, The Consulate General of the Netherlands in New York, The Consulate General of the Republic of Poland in New York, The Consulate General of Federal Republic of Germany in New York and the generous support of the University of Pittsburgh, The Art Institute of Pittsburgh, The Pittsburgh Filmmakers, Carlow University, The Pittsburgh Cultural Trust and media sponsor WYEP.

For more information and to purchase tickets, visit [www.cmu.edu/faces](http://www.cmu.edu/faces).

## "FACES OF OTHERS" SCHEDULE

March 22-April 15

### Week One

#### Thursday, March 22

"El Sicario, Room 164" (France/USA, 2011)  
7:15 p.m. at Melwood Screening Room,  
477 Melwood Ave.  
Opening Night Reception

#### Friday, March 23

"Suicide Room" (Poland, 2011)  
7:30 p.m. at McConomy Auditorium,  
University Center (UC)  
Reception

#### Saturday, March 24

"The Fourth Portrait" (Taiwan/China, 2011)  
6:30 p.m. at McConomy Auditorium, UC  
Reception

"Putin's Kiss" (Denmark/Russia, 2011)  
7 p.m. at Melwood Screening Room,  
477 Melwood Ave.

#### Sunday, March 25

"Battle of Warsaw 1920" (Poland, 2011)  
3D screening  
3 p.m. at AMC Loews Waterfront 22,  
300 Waterfront Drive W  
University of Pittsburgh's Polish Studies  
endowment drive kick-off

"Whores' Glory" (Austria/Germany, 2011)  
5 p.m. at Regent Square Theater,  
1035 S Braddock Ave.

Short Film Competition  
5:30 p.m. at McConomy Auditorium, UC  
Reception

### Week Two

#### Thursday, March 29

"Putin's Kiss" (Denmark/Russia, 2011)  
7 p.m. at McConomy Auditorium, UC  
Reception

"Girl with Black Balloons" (USA/Netherlands,  
2011)  
7:15 p.m. at The Harris Theater,  
809 Liberty Ave.  
Director Corinne van der Borch is scheduled  
to appear.  
Distinctively Dutch Film Festival  
opening reception

#### Friday, March 30

"Joschka and Sir Fischer"  
(Switzerland/Germany, 2011)  
6:30 p.m. at McConomy Auditorium, UC  
Director Pepe Danquart is scheduled to  
appear.  
Reception

### Saturday, March 31

"Position Among the Stars" (Netherlands,  
2010)  
2 p.m. at The Harris Theater, 809 Liberty Ave.  
Conversation with Director Leonard Retel  
Helmrich.

"Alps" (Greece, 2011)  
5:30 p.m. at McConomy Auditorium, UC  
Greek Reception

"El Sicario, Room 164" (France/USA, 2011)  
7:30 p.m. at McConomy Auditorium, UC  
Special Guest

### Sunday, April 1

"Mum" (Netherlands, 2009)  
6:30 p.m. at McConomy Auditorium, UC  
Director Adelheid Roosen is scheduled to  
appear.  
Free and open to the public.

### Week Three

#### Thursday, April 12

"5 Broken Cameras" (Netherlands/France/  
Israel/Palestine, 2011)  
7 p.m. at McConomy Auditorium, UC  
Reception

#### Friday, April 13

"Mourning" (Iran, 2011)  
7:30 p.m. at McConomy Auditorium, UC  
Reception

#### Saturday, April 14

"Best Intentions" (Romania/Hungary, 2011)  
2 p.m. at The Harris Theater, 809 Liberty Ave.

"Essential Killing" (Poland/Hungary/Ireland/  
Norway, 2010)  
7 p.m. at McConomy Auditorium, UC

#### Sunday, April 15

"Black Butterflies" (Netherlands/Germany/  
South Africa, 2011)  
6:30 p.m. at McConomy Auditorium, UC  
Closing Night Reception

### Ticket Prices:

Opening Night (March 22) with  
Reception:  
\$10 Seniors and Students\* | \$15 Others  
Regular Admission:  
\$4 Seniors and Students\* | \$8 Others  
3D Screening:  
\$10 Seniors and Students\* | \$20 Others  
Full Access Festival Pass:  
\$25 Seniors and Students\* | \$50 Others

\*A valid student (Osher) ID must be presented  
when picking up tickets for student pricing.

## FAMILY FUN

QUINN, ZANDER AND BOB  
REPPE, DIRECTOR OF DESIGN  
FOR CAMPUS DESIGN AND  
FACILITY DEVELOPMENT, WERE  
AMONG THE MANY FAMILIES  
WHO ATTENDED FACULTY, STAFF  
FAMILY DAY HOSTED BY THE  
DEPARTMENT OF ATHLETICS  
DURING THE SUNDAY, FEB. 19  
BASKETBALL GAMES AGAINST THE  
UNIVERSITY OF ROCHESTER.



PHOTO BY JOSH CANTOR

## Advancement Groups on the Move

Several groups within the University Advancement Division — Communications Design, Media Relations and Internal Communications — have moved from Alumni House to the fourth floor of the GATF Building on Forbes Avenue across the street from PNC Bank. They join the Individual Giving group, which moved from 6 PPG Place downtown to the GATF Building.

Alumni Relations and Annual Giving will be moving from 6 PPG Place to Alumni House. Phone numbers and email addresses for staff within these groups will remain the same.

# Future Tenant

## Art Space Celebrates Decade of Pushing Boundaries

■ Cora Wang

Art is about experimenting and testing limits.

Future Tenant, a downtown Pittsburgh art space, keeps that in mind as an arts management training laboratory managed completely by students. It's been that way for a decade.

Back in 2002, the art gallery was a vacant storefront waiting for a "future tenant" when Kevin McMahon, president of the Pittsburgh Cultural Trust, envisioned revitalizing the Cultural District. He reached out to Jerry Coltin, faculty adviser of the Master of Arts Management (MAM) program in the Heinz College, and Dan Martin, professor and interim dean of the College of Fine Arts.

"It is a unique opportunity, because it gives students an opportunity to manage at a high-strategic level in a structure that closely imitates the

[nonprofit organization] arts environment, while providing a fiscal safety net," Coltin said. "I do not believe there are any practicum opportunities that can match Future Tenant for the experience of managing a staff, board, budget and programming."

The space is now one of the most vibrant art spaces downtown. And beyond that, a laboratory for creative minds. Ownership as well as an open space, grants MAM students the freedom to carry out great ideas that seem impossible elsewhere.

"The job at Future Tenant offers you the most autonomy, the ability to self-motivate, be hands-on for the things you want to be doing rather than just working underneath people," said Erin Gough, a co-director for the current academic year.

Future Tenant's arts managers have exploited the open space in every possible way for visual and performing arts.

Even the bathroom and windows are utilized, serving as interesting venues for site-specific installations. Twice a year, the space is open to performance artists or groups of all genres. The Trespass program allows artists to spend a week at Future Tenant developing, rehearsing and performing their original work at no cost.

For the past 10 years, Future Tenant has presented work from more than 100 emerging artists and performers.

Core programs include the guest curator program, a monthly open mic night, a performance residency series, and several partnerships with local schools and colleges.

This experience provides the arts managers with a collaborative environment, working not only with fellow students, but artists, curators, local arts and culture organizations, and the community.

"The most valuable thing I found was the collaborative process," said Kate Hansen, who served as a co-director from 2009 to 2010. "I met a lot of really interesting curators, artists, performers, etc. through my work at the space. As someone focused on the visual arts for most of my life, having the experience working with performing/theater artists and managers taught me a lot about the performative arts and both their artistic and technical function."

As Future Tenant enters its 10th year, innovation and collaboration continue to be the driving force of the arts managers running the organization.

For the upcoming annual fundraiser, the theme will be focused on the organization's 10th birthday.

"We've tried to grow the fundraiser as we've grown as an organization, and we're hoping this is the most successful event yet," said Katy Peace, the other co-director for the current year.

Future Tenant is partnering with Bakery Square and The School of Art to hold the event in Bakery Square's grand first floor. Master's of Fine Arts students will exhibit their creative art works. The move to a larger venue allows artists exposure to a larger and more varied audience.

"There's a general trend that things aren't happening because of the [size of Future Tenant's] space," said Lauren Goshinski, marketing and communications manager for the School of Art. "People aren't looking for gallery resources anymore. They are looking for opportunities to come together, raise each other's feasibility, and have a really unique show."

The school is contemplating what Future Tenant 2.0 will look like for the next decade. Part of it will be more collaboration in creative ways between the Future Tenant directors and the school, Goshinski said.



ARTISTS WORK TO INSTALL PIECES AT FUTURE TENANT. BECAUSE OF SPACE CONSTRAINTS, EVERY AVAILABLE SURFACE IS USED FOR ARTWORK, INCLUDING WINDOWS AND THE BATHROOM.

PHOTO COURTESY OF FUTURE TENANT

### FUTURE TENANT BIRTHDAY PARTY

7 p.m., Friday, March 30

1st floor of Google's building in Bakery Square, 6425 Penn Ave., Pittsburgh

Tickets: \$15 for students and \$25 for the public during a presale at <https://www.brownpapertickets.com/event/228493>

\$20 for students and \$30 for the public at the door

For more information, visit [www.futuretenant.org/](http://www.futuretenant.org/).

Another part is community recognition.

"I hope that more people understand what Future Tenant is, from the perspective of the general public," Hansen said.

To make it happen, the current directors are working hard on building momentum and laying the groundwork for the organization.

"We have established a lot of organizational infrastructure that will help future directors take over more seamlessly and not have to reinvent the wheel, so to speak," Peace said.

Coltin said that the management model for the art space would change in the next academic year. Instead of two co-directors, Future Tenant will have an executive director with two associate directors.

"We are committed to that learning process and the evolution of the space in realization of Future Tenant's mission to educate new managers, give exhibition and performance opportunities to emerging artists and to initiate new audiences to view the work," he said.



# TechSpark Attracts, Connects Innovators

■ Kevin O'Connell

We've all experienced the college career fair.

A gym floor cordoned off into pipe-and-draped booths stuffed with employers. Hordes of students dressed up in their finest, gripping their resume-filled binders, their eyes darting around the room in search of employers that might be hiring a person with their skills, and with their 30-second self-promotional elevator pitch rehearsed and at the ready.

For many traditional types of employers, this oft-repeated dance of introductions between employers and students works quite well.

But for those entrepreneurial types who aren't looking for the traditional job experience and who may be well on their way to building their own startup — enter TechSpark.

Last month the Career and Professional Development Center (CPDC) launched a new type of career networking event — one better suited to the types of students and companies who want to share in meaningful conversation about the excitement of the entrepreneurial spirit.

More than 100 students and 25 companies — including Braintree Capital and Nest Labs — attended TechSpark in Rangos Ballroom. Alumnus Tony Berkman (S '88, TPR '98) gave the keynote address, followed by short presentations from select companies and an open networking session designed to engage students, alumni and recruiters.

To help further these conversations, CMU's Greenlighting Startups initiative was on hand. Greenlighting Startups is



DANIEL BISHOP OF QUALARIS WAS ONE OF MORE THAN TWO DOZEN COMPANY REPRESENTATIVES WHO ATTENDED TECHSPARK.

a portfolio of five business incubators designed to speed company creation at CMU. In the past 15 years, Carnegie Mellon faculty and students have helped to create more than 300 companies and 9,000 jobs, and the university averages 15 to 20 new startups each year.

Wahab Owolabi, assistant director of employer development at the CPDC and lead organizer of TechSpark, said, "We listened to what our alumni and the companies we work with were telling us, and thought, 'why not try to create an event as innovative as the people we are trying to connect?'"

Innovation was the word of the day. These companies thrive on cutting-edge ideas at the core of their formation.

"I enjoyed the smaller, low-key approach of the targeted audience," said Jose Cong, a recruiter with Nest Labs, a company co-founded by alumnus Matt Rogers. "Most startups tend to be lost in the traditional career fairs as students tend to gravitate toward the bigger names. TechSpark evens the playing field by giving the startups an opportunity to connect with students in a more intimate, technology-specific setting."

Students like Russell Kirmayer, a junior physics major who would like to work for a startup, shared enthusiasm for the unconventional structure.

"I was able to have more natural, intimate conversations with [employers] that allowed for a much better under-

standing of the companies, and hopefully their better understanding of me as a potential employee," he said.

This approach permeated the event, as many companies described their workplace culture as "laid back" and non-traditional. Braintree representatives stated they weren't seeking people looking to move into management because they "don't have that here."

By any account, TechSpark succeeded in its goals. Owolabi noted that he would be building on the ideas and feedback gathered to improve the event for next year.

*Kevin O'Connell is assistant director for marketing and communications at the Career & Professional Development Center.*

## International Business

### CMU Brings Portuguese Startups to Pittsburgh

■ Piper Staff

Carnegie Mellon is taking its entrepreneurial expertise abroad.

A new pilot Entrepreneurship-in-Residence (EIR) program at Carnegie Mellon Portugal, created in partnership with the University Technology Enterprise Network (UTEN), recently brought four Portuguese companies to Pittsburgh to help them extend their businesses to the U.S.

"Overall, the program was a tremendous success," said Lori Spears, associate director of Carnegie Mellon Portugal. "The companies were very pleased with the one-on-one meetings that were held and they felt as though the conversations will assist them in launching in the U.S."

A trip to the states was the third phase of the new incubator program that started last summer. The first two phases in Portugal provided mentoring and training in developing sales pitches to potential investors and customers.

The seven-month training period also provided information on understanding markets and competition, university relationships, differentiation and segmentation, and partnerships for development and distribution.

The mentoring sessions were spearheaded by Tara Branstad, associate director of the Center for Technology Transfer and Enterprise Creation, Adjunct Professor Babs Carryer, an embedded entrepreneur with Project Olympus, and Dave Mawhinney, associate director of the Donald H. Jones Center for Entrepreneurship and an assistant teaching professor at the Tepper School of Business.

Four Portuguese companies — FeedZai, ObservIT, TreatU and Faces.in — traveled to the Pittsburgh campus in February for three days of intensive networking with companies, banks, attorneys, students and faculty.

FeedZai aims to enhance the real-time processing of information for

organizations. ObservIT's dream is to be a market-leading company in computer vision technology. Treat U's goal is to improve patient's health care and reduce the costs of health care through a novel and versatile platform for targeted drug delivery. And Faces.in is a mobile social networking startup.

At Carnegie Mellon, the fledgling companies engaged in panel discussions with professionals specializing in immigration law, intellectual property issues and business development. They also collaborated with faculty and staff involved in CMU's Greenlighting Startups ([www.cmu.edu/startups](http://www.cmu.edu/startups)) initiative about entrepreneurial resources available to them.

The companies made presentations to potential investors and to 37 corporate executives during an Innovation Happens session at AlphaLab on the South Side. Innovation Happens, supported by Project Olympus, is a group of entrepreneurs and corporate executives who con-

nect to network and see demonstrations from innovative start-ups.

Following the networking session, each company met individually with several potential customers, investors and clients.

The U.S. visit concluded with an International Showcase at CMU, where the Portuguese companies made presentations to potential clients and investors about their startups and the importance of setting up U.S. operations. The showcase was presented in collaboration with CMU Greenlighting Startups and sponsored by K&L Gates LLP.

"It's really too soon to determine if the companies will set up operation in the U.S. as a result of the EIR," Spears said. "However, all parties involved are committed to diligently working to ensure their success. We will be working very closely with the companies to provide guidance as various opportunities present themselves."

# Churchill Scholar

## Biology Student is Third CMU Winner in a Row

■ Jocelyn Duffy

Judy Savitskaya, a senior computational biology major and Science and Humanities Scholar, is one of 14 students nationwide to receive a 2012 Churchill Scholarship, which funds a year of postgraduate study at the University of Cambridge in England. The Churchill Scholarships are one of the most prestigious awards for studying abroad in the United Kingdom.

This is the third consecutive year that a student from the Mellon College of Science has won. Savitskaya follows Swati Varshney in 2010 and Rebecca Krall in 2011. Additionally, Courtney Ondeck, a student in the College of Engineering, received the scholarship in 2008. Prior to the recent string of winners, only six CMU students received a Churchill Scholarship since the program began in 1963.



JUDY SAVITSKAYA

“I really love studying abroad,” said Savitskaya, who spent a semester studying at Universidad Antonio de Nebrija in

Madrid, Spain. “The Churchill Scholarship is a great opportunity for me to do science in another country before I start my doctoral training in the United States.”

The 21-year-old from Fair Lawn, N.J., will study in the School of the Biological Sciences at Cambridge, where she will pursue a Master of Philosophy in Plant Sciences and conduct research in synthetic biology, a field in which scientists design and construct new biological parts and systems.

The Winston Churchill Foundation of the United States offers the scholarships to outstanding American students who wish to pursue graduate studies in engineering, mathematics or the sciences at the University of Cambridge. The scholarship, which is worth about \$50,000, pays for a year of tuition, fees,

living expenses and travel.

As a computational biology major with a concentration in neural computation, Savitskaya has studied how networks of neurons in the brain work by designing virtual networks and simulating their behavior. This work sparked her interest in synthetic biology, which she will study when she joins Jim Haseloff’s research group at Cambridge.

Savitskaya worked closely with Stephanie Wallach and Jennifer Keating-Miller at CMU’s Fellowships and Scholarships Office on the extensive Churchill Scholarship application process, and she credits them with much of her success.

“Because of their support, I feel like I’ve matured so much as a human being. There’s not a chance I could have done this without them,” she said.

## CMITES: Primary Education Program Celebrates 20 Years

■ Heidi Opdyke

Although they may not be tall enough to ride the Phantom’s Revenge at Kennywood, some young students are learning all about it.

The Carnegie Mellon Institute for Talented Elementary and Secondary Students, best known as C-MITES, has allowed students from kindergarten to ninth grade to explore deeper into subjects for the last 20 years. Many of the program’s alumni are now graduated from the university.

Ann Lupkowski Shoplik, director of the program since its inception, said the number of classes and range of topics has grown significantly over the past two decades.

“We develop classes that are challenging for the students. The idea is to give them the opportunity to stretch in ways that they can’t do in school. They also have the opportunity to work with intellectual peers. It’s been very rewarding,” she said.

C-MITES offers challenging programs on weekends and during the summer. The enrichment curriculum complements what students have studied in school in mathematics, science and the humanities.

Some of the programming for this year includes courses on amusement park physics, the science of Harry Potter, solving a murder mystery and building robots. Others involve computer programming as well as probability and

statistics.

Shoplik said they’ve added a C-MITES junior program for students in kindergarten through second grade.

“We’ve had a great demand from parents for classes for younger students,” she said.

While many of the participants are local and often children of CMU employees, Shoplik said participants have come from as far as France, Singapore, the Philippines and Qatar.

“The families often make a vacation out of it. It has worked out nicely with the kids taking morning classes and then the families going sightseeing in the afternoon,” she said.

Nearly 5,000 students participate in the program annually. She said it’s

a common misperception that students must be recognized as being “gifted” in order to participate.

“The classes are open to all bright, academically able kids who want more of an opportunity to be challenged above and beyond what they can get in school,” she said.

Weekend classes began March 4, and the deadline for summer registration is April 6. To help families in need of financial aid, C-MITES offers full and partial scholarships. The program is having a 20th anniversary celebration fundraiser in October.

For more information, register online for coming events at [www.cmu.edu/cmities/](http://www.cmu.edu/cmities/).

### NEWS BRIEFS

#### “The Last Lecture” Co-Author Zaslow Dies

Best-selling author, longtime Wall Street Journal columnist and Carnegie Mellon alumnus Jeffrey Zaslow (DC’80) died Friday, Feb. 10 from injuries suffered in an automobile accident in northern Michigan. He was 53.

Zaslow co-authored “The Last Lecture” with the late CMU Computer Science Professor Randy Pausch. After driving 300 miles from Detroit to Pittsburgh to attend Pausch’s world-famous presentation in CMU’s McConomy Auditorium, Zaslow wrote about it in his widely read Wall Street Journal column, “Moving On.” The book followed.

Zaslow was dedicated to CMU and its students. He became an annual speaker during CMU’s freshman orientation activities, speaking about his days writing the book with Pausch, the lessons he learned from the experience and his student days at CMU. He also frequently visited classes to speak with students. He received a 2009 Distinguished Service Award from the Alumni Association.

Carnegie Mellon has established “The Jeff Zaslow Memorial Fund” and will work with the Zaslow family regarding a designation for gifts to the fund.

#### Board of Trustees Sets 2012-2013 Tuition

The Carnegie Mellon Board of Trustees set undergraduate tuition — as it does each February — for the coming academic year. The board approved one of the smallest tuition increases in 37 years at CMU: 3.99 percent for incoming students in 2012-2013 and 2.99 percent for current students.

For 2012, tuition for entering undergraduate students will be \$44,880. Housing costs were set at \$6,810 and board costs at \$4,740, representing increases of \$260 and \$180, respectively. In sum, the cost of attendance will increase 3.19 percent for continuing students and 3.97 percent for incoming students in Pittsburgh.

#### President Cohon Elected To Academy of Engineering

Carnegie Mellon President Jared L. Cohon was elected to the National Academy of Engineering, one of the highest professional distinctions granted to an engineer. Cohon was elected for his contributions to environmental systems analysis and national policy and leadership in higher education.

Academy membership honors those who have made outstanding contributions to “engineering research, practice, or education, including, where appropriate, significant contributions to the engineering literature,” and to the “pioneering of new and developing fields of technology, making major advancements in traditional fields of engineering, or developing/implementing innovative approaches to engineering education.”

Cohon also received an honorary degree in science and technology from the Korea Advanced Institute for Science and Technology (KAIST) and delivered the institute’s keynote address at its commencement ceremony in late February.



#### Historian Co-Authors “Teenie” Harris Book

Joe W. Trotter, the Giant Eagle Professor of History and Social Justice, has co-authored a new book chronicling the photography of Charles “Teenie” Harris, famous for capturing the essence of African-American life in Pittsburgh.

“Teenie Harris, Photographer: Image, Memory, History” was published in collaboration with the University of Pittsburgh Press and the Carnegie Museum of Art.

In addition to Trotter, the book’s co-authors include Cheryl Finley, assistant professor of art history at Cornell University, and Laurence Glasco, associate professor of history at the University of Pittsburgh.

#### CMU Press Book “Magpies” Wins Fla. Gold

“Magpies,” a collection of short stories by Lynne Barrett published by Carnegie Mellon University Press, has won the gold medal for general fiction in the sixth annual Florida Book Awards. The awards are designed to spotlight Florida’s best books and their authors.

A professor of English at Florida International University, Barrett’s previous two books also

# Energy, Economics, Commerce

## VIP Visitors Discuss Global Affairs on Campus

■ Piper Staff

Two U.S. cabinet members and the president of the World Bank visited campus in February.

U.S. Secretary of Energy Steven Chu met with students at an event hosted by the Tepper Energy Club. Discussion topics with Chu, a Nobel laureate in physics, ranged from smart grid technologies to the future of the nuclear industry post-Fukushima.

“Fukushima reminded us that you can’t let your guard down,” Chu said. “And it doesn’t matter where around the world, if you have a nuclear accident, it affects everyone.”

Chu is a return visitor to the CMU community, having lectured at Carnegie Mellon Qatar in 2010.

Robert Zoellick, the 11th president of the World Bank Group, was part of a session sponsored by the Center for International Relations and Politics, the Thomas M. Kerr, Jr. Prelaw Program and the Global Studies Major.

“Most people think what ‘banks’ are about is lending money,” Zoellick said. “But in reality, when the World Bank Group is most effective, money is only one component.”

Zoellick, who has led the World Bank since 2007, announced he will step down as president in June.

Commerce Secretary and former CEO John Bryson visited Pittsburgh to tour Aquion Energy, a CMU spin-off and battery technology company. He also led a discussion at CMU with business leaders, along with CMU Vice President of Research Rick McCullough and Pittsburgh Mayor Luke Ravenstahl on business growth, innovation, and public-private partnerships.

Talks from the three men are online and available at [www.cmu.edu/piper](http://www.cmu.edu/piper).



U.S. SECRETARY OF COMMERCE JOHN BRYSON (SECOND FROM LEFT) IS PICTURED HERE WITH COLLEGE OF ENGINEERING DEAN PRADEEP KHOSLA, VICE PRESIDENT FOR RESEARCH RICK MCCULLOUGH AND ALLEGHENY COUNTY CHIEF EXECUTIVE RICH FITZGERALD.



U.S. SECRETARY OF ENERGY STEVEN CHU



WORLD BANK PRESIDENT ROBERT ZOELICK

were published by CMU Press: “The Secret Names of Women” and “The Land of Go.”

### Waggoner Awarded Connan Professorship

Professor of Biological Sciences Alan Waggoner has been awarded the Maxwell H. and Gloria C. Connan Professorship in the Life Sciences. Waggoner is best known for inventing fluorescent dyes that allow scientists to see inside cells. His cyanine dyes have helped scientists to better understand how genes are turned on and off, and how cellular functions are regulated. Under Waggoner’s leadership, CMU’s Molecular Biosensor and Imaging Center has become world renowned for its expertise in biochemistry, genetics, dye chemistry and imaging.

College of Engineering alumnus and emeritus trustee Maxwell “Mac” Connan and his wife, honorary alumna Gloria Connan, were dedicated to the advancement of CMU.

In addition to this professorship, they endowed a scholarship and funded the Connan Room in the University Center.

### Sessions To Cover Research Conduct

The Office of Research Integrity & Compliance has been holding several sessions covering Responsible Conduct of Research. The schedule is as follows:

#### March 27

International Research Issues & Considerations, 12-1 p.m., UC, Rangos 1  
Presenter: Sarah Belousov, Project Manager, Robotics Institute

#### April 4

Who Owns Research Data? 12-1 p.m., UC, Connan Room  
Presenter: Faculty TBD

#### April 11

Safeguarding Research Technology, 12-1 p.m., UC, Connan Room  
Presenter: FBI Special Agent TBD

#### May 1

Conflict of Interest - New Rules, 12-1 p.m., UC, Connan Room  
Presenter: Ann Mathias, VP Research Integrity & Compliance  
To register for any session go to [www.surveymonkey.com/s/K2MQKHF](http://www.surveymonkey.com/s/K2MQKHF).

### Carnegie Mellon Among Green Power Leaders

Carnegie Mellon ranks second among colleges and universities in the U.S. and 39th among colleges, universities, Fortune 500 companies and local, state and federal government agencies on the U.S. Environmental Protection Agency’s Green Power Partnership list for its use of wind and solar power.

The list highlights the annual green power purchases of leading organizations within the U.S. One hundred percent of the electricity used by CMU comes from wind and solar power.

### EH&S Sponsors AED/CPR Training Classes

Seats remain for the March 21 AED/CPR class sponsored by Environmental Health & Safety. The class will take place from 1 to 3 p.m. in Rangos 2.

To register, go to [www.cmu.edu/ehs/](http://www.cmu.edu/ehs/), click on the Training tab at the top of the page, then click on AED training and follow the link to the registration page.

Some people have indicated that they are reluctant to attend a class of this nature because of the danger of being sued. Pennsyl

vania has a Good Samaritan law that prevents this from happening, and nobody would be held liable should they unsuccessfully use an AED.

### CMU-Rwanda Begins Teaching Professional Development Program

Carnegie Mellon University-Rwanda held its first professional development class in mid-February. The class, “Introduction to Strategic Uses of Digital Information,” is taught by Professor Michel Bézy. CMU-R, the first major higher education institution in the U.S. to offer graduate engineering degree programs in Rwanda, will begin teaching master’s degree courses in information technology in August.

### Gilman Named Chair of Telescope Council

Fred Gilman, dean of the Mellon College of Science, has been elected chair of the AURA Management Council for the Large Synoptic Survey Telescope (LSST). The council will oversee the final stages of the design and then the construction of the LSST, which is being built by a consortium of universities and national laboratories including Carnegie Mellon.

■ Jocelyn Duffy

The winner of the 2011 Dickson Prize in Science, Marvin L. Cohen, is one of the most influential condensed matter physicists in the world. His work has impacted important fields including nanotechnology and materials science, and has helped to explain superconductivity — something that Einstein thought might never be explained.

Given annually since 1970, the Dickson Prize in Science is awarded by Carnegie Mellon to an individual who has made outstanding contributions to science in the United States. Cohen, who is a University Professor of Physics at the University of California Berkeley, and a senior faculty scientist at the Lawrence Berkeley National Laboratory, will give the Dickson Prize Lecture, titled “Einstein, Condensed Matter Physics, Nanoscience & Superconductivity,” at 4:30 p.m., on Thursday, March 8 in McConomy Auditorium.

In his lecture, Cohen will talk about Einstein’s research in and contributions to condensed matter physics — the study of the physical properties of condensed



MARVIN L. COHEN

PHOTO COURTESY OF MARVIN L. COHEN

phases of matter, like liquids, solids and gases. Cohen also will talk about more recent work in the field including his own research on photovoltaics, nanoscience and superconductivity.

In his early career Cohen developed the “pseudopotential model,” which allows scientists to calculate what will happen to materials under intense pressure. The model is used to predict the properties of never-before-seen

**WHAT:** DICKSON PRIZE LECTURE, “EINSTEIN, CONDENSED MATTER PHYSICS, NANOSCIENCE & SUPERCONDUCTIVITY”

**WHEN:** 4:30 P.M., THURSDAY, MARCH 8

**WHERE:** MCCONOMY AUDITORIUM

**ONLINE:** WWW.CMU.EDU/DICKSON-PRIZE/

materials. His later work explained the electronic nature of buckyballs using the standard model of superconductivity. Cohen continues to do research on nanoscience and nanotechnology and in materials science.

“Cohen is world renowned for creating and applying quantum theories to explain and predict the properties of materials,” said Fred Gilman, dean of the Mellon College of Science. “His work spans a broad spectrum of phenomenon, and its impacts are most greatly felt in the fields of semiconductor physics and nanoscience.”

Cohen’s research is among the most influential in physics, with his papers being some of the most cited in

condensed matter physics. He has been awarded the National Medal of Science, the American Physical Society (APS) Oliver E. Buckley Prize for Solid State Physics, the APS Julius Edgar Lilienfeld Prize, the Foresight Institute Richard P. Feynman Prize in Nanotechnology, the Technology Pioneer Award from the World Economic Forum and the Berkeley Citation.

He is a fellow and past-president of the APS, a fellow of the American Association for the Advancement of Science, and a member of the National Academy of Sciences, the American Academy of Arts and Sciences and the American Philosophical Association.

The lecture is free and open to the public.

## Researchers Say a Third of Tweets Worthwhile

■ Byron Spice

Twitter users choose the microblogs they follow, but that doesn’t mean they always like what they get.

Researchers at Carnegie Mellon, MIT and Georgia Tech found that users say only a little more than a third of the tweets they receive are worthwhile.

Other tweets are either so-so or, in one out of four cases, not worth reading at all.

Twitter says more than 200 million tweets are sent each day, yet most users get little feedback about the messages they send besides occasional retweets by followers, or when followers opt to stop following them.

“If we understood what is worth reading and why, we might design better tools for presenting and filtering content, as well as help people understand the expectations of other users,” said Paul André, a post-doctoral fellow in Carnegie Mellon’s Human-Computer Interaction Institute and lead author of the study.

He and his colleagues — Michael Bernstein and Kurt Luther, doctoral students at MIT and Georgia Tech, respectively — created a website, “Who Gives a Tweet?” <http://wgatweet.com/>, to collect reader evaluations of tweets.

People who visited the “Who Gives a Tweet” site were promised feedback on their tweets if they agreed to anonymously rate tweets by Twitter users they already were following. Over

a period of 19 days in late 2010 and early 2011, 1,443 visitors to the site rated 43,738 tweets from the accounts of 21,014 Twitter users they followed.

Overall, the readers liked just 36 percent of the tweets and disliked 25 percent. Another 39 percent elicited no strong opinion.

“A well received tweet is not all that common,” Bernstein said. “A significant amount of content is considered not worth reading, for a variety of reasons.”

Despite the social nature of Twitter, tweets that were part of someone else’s conversation, or updates around current mood or activity were the most strongly disliked.

On the other hand, tweets that included questions to followers, information sharing and self-promotion (such as links to content the writer had created) were more often liked.

The researchers acknowledge, however, that the study participants were not fully representative of Twitter users. Most were referred to the study by technology-focused friends and websites and could be categorized as “informers,” who value sharing links and content. Other studies have suggested a schism among users, with others favoring the social “me” aspects of social media.

“Our research is just a first step at understanding value on Twitter,” Luther said. “Other groups within Twitter may value different types of tweets for entirely different reasons.”

### WHO GIVES A TWEET?

The study suggests nine tips to improve tweet content.

### OLD NEWS IS NO NEWS.

Real-time information with fresh links work best.

### KEEP IT TO YOURSELF.

Too much personal information and Foursquare check-ins are disliked.

### CONTRIBUTE TO THE STORY.

Add an opinion, fact or comment before retweeting.

### PROVIDE CONTEXT.

Links to blogs or photos without a reason were called “lame.”

### KEEP IT SHORT.

Leave space for others to comment on retweets.

### DON'T WHINE.

Nobody likes a complainer or negative comments.

### LIMIT SYNTAX.

Too many #hashtags, @mentions and abbreviations are tough to read.

### FOR PUBLIC FIGURES.

People follow you for professional insights not day-to-day gossip.

### BE A TEASE.

Don't give everything away. Hook readers with a bite.

## Presidential Search

CONTINUED FROM PAGE ONE

- Terrance Hayes, professor, Department of English, Dietrich College of Humanities and Social Sciences;
- Ramayya Krishnan, dean, H. John Heinz III College;
- Teddy Seidenfeld, Herbert A. Simon Professor of Philosophy and Statistics, Dietrich College of Humanities and Social Sciences;
- Dan Siewiorek, Buhl University Professor of Computer Science and Electrical and Computer Engineering, School of Computer Science;
- Susanne Slavick, Andrew W. Mellon Professor of Art, School of Art, College of Fine Arts;
- Chester Spatt, Pamela R. and Kenneth B. Dunn Professor of Finance; director, Center for Financial Markets, The Tepper School of Business

Lane said the committee will host open forums this semester to gather input from the university community about the future direction and leadership of Carnegie Mellon. The schedule, locations and content of the open forums will be announced soon.

Input also can be provided through a Presidential Search website, which will have information about the search process, including a general timeline, and will include progress reports within the bounds of confidentiality. It is hoped that a new president will be named in the spring of 2013.