



# the PIPER

CMU'S NEWS SOURCE FOR FACULTY & STAFF 5/14 ISSUE

Carnegie Mellon University

## Applause, Applause

### CMU Partners with the Tony Awards; Six Alumni Snag Tony Nominations

■ Piper Staff

This three-act play drew rave reviews on Broadway.

**ACT 1:** It is announced that Carnegie Mellon becomes the first exclusive higher education partner of the Tony Awards®.

**ACT 2:** As part of the partnership, Carnegie Mellon and the Tonys will jointly create and launch the “Tony Honor for Excellence in Theatre Education,” the first national recognition program to honor K-12 theatre educators.

**ACT 3:** A day after the partnership is formally announced, six alumni from Carnegie Mellon’s School of Drama are nominated for 2014 Tony Awards, Broadway’s highest honor.

And the nominees are:

- Jamie DeRoy (A’67) (producer) Best Musical, “A Gentleman’s Guide To Love and Murder”;
- Sutton Foster Best Performance by an Actress in a Leading Role in a Musical, “Violet”;
- Peter Hylenski (A’97) Best Sound Design of a Musical, “After Midnight”;
- Cherry Jones (A’78) Best Performance by an Actress in a Leading Role in a Play, “The Glass Menagerie”;
- Leigh Silverman (A’96) Best Direction of a Musical, “Violet”;
- Paula Wagner (producer) Best Play, “Mothers and Sons.”

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**Read about Carnegie Mellon’s 117th Commencement activities in a special pullout section.**

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A DAY AFTER CARNEGIE MELLON BECAME THE FIRST EXCLUSIVE HIGHER EDUCATION PARTNER OF THE TONY AWARDS, SIX CMU ALUMNI WERE NOMINATED FOR 2014 TONYS. THEY ARE: (CLOCKWISE FROM TOP LEFT): JAMIE DEROY, CHERRY JONES, LEIGH SILVERMAN, PAULA WAGNER, PETER HYLENSKI AND SUTTON FOSTER.

## Unknown Warhol Works Discovered

■ Piper Staff

A multi-institutional team of new-media artists, computer experts and museum professionals has discovered a dozen, previously unknown, artworks by Andy Warhol on aging floppy disks from 1985. Warhol earned a bachelor’s degree in fine arts from Carnegie Mellon, then Carnegie Institute of Technology, in 1949.

The purely digital images, “trapped” for nearly 30 years on Amiga® floppy disks stored in the archives collection of The Andy Warhol Museum (AWM), were discovered and extracted by members of the CMU Computer Club, with assistance from the AWM’s staff, CMU’s Frank-Ratchye STUDIO for Creative Inquiry (FRSCI), the Hillman Photography Initiative at the Carnegie Museum of Art

(CMOA) and New York-based artist Cory Arcangel.

Warhol’s Amiga experiments were the products of a commission by Commodore International to demonstrate the graphic arts capabilities of the Amiga 1000 personal computer. Created by Warhol on prototype Amiga hardware in his unmis-

takable visual style, the recovered images reveal an early exploration of the visual potential of software imaging tools, and show new ways in which the preeminent American artist of the 20th century was years ahead of his time.

The impetus for the investigation

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# Five Elite Educators Named University Professors



MARK S. KAMLET

## ■ Piper Staff

*Carnegie Mellon University Provost and Executive Vice President Mark Kamlet and four professors, Sheldon Cohen, Jim Daniels, Irene Fonseca and Manuela Veloso, have received the elite distinction of University Professor, the highest academic accolade a faculty member can achieve at Carnegie Mellon.*

*The rank of University Professor recognizes a faculty member for representing the intellectual leadership of Carnegie Mellon through their expertise and accomplishments in their respective fields of study.*

## Mark S. Kamlet

Kamlet will be stepping down as provost and executive vice president on July 1, after serving as CMU's chief academic officer for the past 14 years.

"Mark is one of the foremost thinkers on the future of education. He is a



SHELDON COHEN

true visionary and has contributed as a scholar and as a leader to the university in a wide variety of ways," said Ramayya Krishnan, dean of the Heinz College and the William W. and Ruth F. Cooper Professor of Management Science and Information Systems.

Kamlet is a professor of economics and public policy with joint appointments in the Heinz College and in the Department of Social and Decision Sciences in the Dietrich College of Humanities and Social Sciences. He joined Carnegie Mellon as a faculty member in 1976. From 1990 to 1993 he served as department head of Social and Decision Sciences. From 1993 to 2000 he served as dean of the Heinz College.

A leading expert in economics and public policy, the economics of health care, quantitative methodology and public finance, Kamlet also has worked with local government and with Carnegie Mellon's many outreach initiatives to foster economic, educational and cultural development in southwest Pennsylvania.

As provost and executive vice president, he has overseen the research and educational activities of the university, including budgetary and space issues, and the appointment, reappointment, promotion and tenure processes for faculty.

He also has been actively engaged in the university's technology commercialization activities, the global growth of the university, and in advancing the university's path-breaking research in technology enhanced learning, including the commercialization of CMU research in this field.

Kamlet earned his bachelor's degree in mathematics from Stanford University, and a master's degree in mathematical statistics and a Ph.D. in economics from the University of California at Berkeley.

Kamlet plans to take a sabbatical prior to returning to his full-time faculty role and will continue to assist in key university matters.

## Sheldon Cohen

Cohen is the Robert E. Doherty Professor of Psychology and director of the Laboratory for the Study of Stress, Immunity and Disease.



JIM DANIELS

"Sheldon Cohen is an extraordinarily accomplished and influential health psychologist," said John Lehoczky, dean of the Dietrich College. "Today, we take it for granted knowing that stress and disease are linked, but we know this because of Sheldon's innovative work that bridges biology and psychology. Beyond his scientific discoveries, Sheldon is an exceptional teacher, and his work in both the classroom and the laboratory have helped make Carnegie Mellon and the Department of Psychology internationally recognized for health and human behavior research."

A member of the National Academies' Institute of Medicine, Cohen investigates the effects of behavioral factors in immunity and physical disease. His work includes pioneering research on the impact of psychological stress, social networks and socio-economic status on infections, cardiovascular disease and asthma. He has contributed several scales assessing psychological and social predictors of health, including the Perceived Stress Scale, the most widely used scientific tool to measure the perception of stress.

Cohen, who joined the CMU faculty in 1982, was the first to provide scientific evidence that stress increases susceptibility to the common cold. His systematic work in this area has demonstrated that the longer a stressful event lasts, the greater the risk for illness and that enduring interpersonal conflicts and stress at work are especially potent risks. He has demonstrated that the biological bases for these findings include the effects of stress on the body's ability to control the release of inflammatory chemicals, and stress associated shortening of telomeres (caps on the ends of chromosomes) in immune cells that indicate progression to cell death.

Among his numerous awards and honors is the 2002 Association for Psychological Science James McKeen Cattell Fellow Award for Outstanding Lifetime Contribution to Research in Applied Psychology, and the 2004 American Psychological Association's Award for Distinguished Scientific Contributions to Psychology. He is one of a few psychologists to frequently publish in mainstream



IRENE FONSECA

medical journals, such as the Journal of the American Medical Association and the New England Journal of Medicine.

## Jim Daniels

Daniels is the Thomas Stockham Baker Professor of English and an award-winning author, poet and screenwriter.

"Jim Daniels has become the Poet Laureate of Carnegie Mellon. His work unites the community, when it faces tragic events such as the loss of family members from 9/11 and when it celebrates events like the inauguration of a new university president," Dietrich College Dean John Lehoczky said. "Beyond his outstanding career as a poet and filmmaker, Jim Daniels is an extraordinarily dedicated teacher who is committed to his own students, even well after they graduate, and to young talented students in the broader community. His tireless community outreach efforts provide a model for all educators to follow."

Daniels, who has been on the CMU faculty since 1981, is known for capturing the gritty culture of working-class urban life in his writing. Last fall, he published his 14th collection of poetry, "Birth Marks," which was named to the 2014 Michigan Notable Books list.

His "Having a Little Talk with Capital P Poetry" won the Independent Publisher Book Awards 2012 Gold Medal for Poetry and the 2012 Paterson Award for Literacy Excellence from the Paterson Poetry Center.

Daniels has published four books of short stories, and his fifth, "Eight Mile High," will be published later this year. He also has written three films, including 2010's "Mr. Pleasant," which appeared in more than a dozen film festivals.

Daniels has won the Brittingham Prize for Poetry, the Blue Lynx Poetry Prize, the Tillie Olsen Prize and two fellowships from the National Endowment for the Arts and Pennsylvania Council on the Arts. His poetry has appeared in the "Pushcart Prize" anthology "Best American Poetry," Billy Collins' "Poetry 180" and Ted Kooser's "American Life in Poetry" series.

Daniels encourages Pittsburgh-area high school and college students to



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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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MANUELA M. VELOSO

explore personal experiences with race and discrimination through poetry and prose through the annual Martin Luther King, Jr. Writing Awards, which he founded 15 years ago. The awards program has received more than 2,000 entries since its inception. Coro Pittsburgh honored Daniels this year for “values-based leadership in the service of an inclusive community.”

### Irene Fonseca

Fonseca, the Mellon College of Science Professor of Mathematics, has been a member of the Carnegie Mellon faculty since 1987. She is an internationally respected educator and researcher in the field of applied mathematics.

Her research lies at the interface of applied analysis with materials and imaging sciences. In particular, her work focuses on the mathematical study of a variety of novel man-made materials,

including ferroelectric, magnetic and magnetostrictive materials, shape memory alloys, composites and liquid crystals. She also studies the variational analysis of denoising, detexturing, inpainting and recolorization in computer vision.

Fonseca directs Carnegie Mellon’s renowned Center for Nonlinear Analysis, a center devoted to research and training in applied mathematics at the intersection of mathematics, the physical sciences and engineering. She also is the director of the Partnerships for International Research and Education project, a National Science Foundation-funded multi-institution grant that addresses issues in applied mathematics and mechanics that arise from materials science. These programs support groundbreaking research in applied mathematics, as well as the education and early careers of many young mathematicians. Fonseca is an essential member of the faculty at CMU-Portugal, serving as director of the applied mathematics doctoral program.

“Irene’s international reputation has contributed to the successes of the Department of Mathematical Sciences — and the university as a whole,” said Fred Gilman, dean of the Mellon College of Science. “For all of her accomplishments, Irene is dedicated to her students, making training the next generation of mathematicians and materials scientists her top priority.”

Fonseca has a strong international presence in the mathematics community. She is serving a two-year term as president of the Society for Industrial and

Applied Mathematics. She is the second woman to hold this leadership position. In addition, she sits on many committees and the boards of several major international research centers and universities.

In 1997, she was bestowed knighthood in the Military Order of St. James by the president of Portugal in recognition of her contributions to scientific progress in the European Union.

### Manuela M. Veloso

Veloso is the Herbert A. Simon Professor of Computer Science and a researcher in artificial intelligence and robotics. She founded and directs the CORAL research group that investigates autonomous robots and software agents that Collaborate, Observe, Reason, Act and Learn to perform planning, execution and learning tasks.

“Manuela Veloso has been a source of energy and inspiration in the fields of artificial intelligence and robotics throughout her career,” said Randal E. Bryant, dean of the School of Computer Science. “She has been especially effective at building teams of students and researchers to create systems that address complex, engineering challenges, such as robots that play soccer or that collaborate with humans.”

Veloso is internationally recognized for her pioneering work on robot soccer, an important research tool for studying how autonomous agents can work cooperatively in complex, uncertain environments. Since 1997, the robot

teams fielded by her and her students have perennially been strong competitors in the championships of the International RoboCup Federation, of which she is a past president.

One of her main research areas in recent years has been what she calls symbiotic autonomy, in which intelligent mobile robots are autonomous and aware of their physical, cognitive and perceptual limitations, and proactively address those shortcomings. Her research team explores this concept with their CoBot mobile service robots. The robots autonomously navigate a multi-floor office building to perform errands as requested by people but, without arms, must proactively ask people for help with handling objects and pushing elevator buttons. They also can access the Internet for information they lack and can learn from that access.

Veloso joined the faculty in 1992 after earning her Ph.D. in computer science at Carnegie Mellon.

The current president of the Association for the Advancement of Artificial Intelligence (AAAI), she has been honored as an Einstein Chair Professor by the Chinese Academy of Sciences and is a fellow of AAAI, IEEE and AAAS. She is a recipient of the Autonomous Agents Research Award from the Association for Computing Machinery’s Special Interest Group on Artificial Intelligence, as well as a National Science Foundation CAREER Award and the university’s Allen Newell Medal for Excellence in Research.

## University Center Named in Cohon’s Honor

■ Kelly Solman

Carnegie Mellon recognized President Emeritus Jared L. Cohon’s many accomplishments and contributions to campus life by naming the University Center after him.

The honor follows the tradition of naming buildings after former presidents, and the Jared L. Cohon University Center serves as the prominent and popular meeting place for the diverse university community that Cohon, CMU’s eighth president, strengthened.

“During Jared L. Cohon’s tenure as university president, Carnegie Mellon has advanced on many fronts, including accelerating its long tradition of being a catalyst of regional economic prosperity,” said CMU President Subra Suresh. “We are very pleased to name the University Center in honor of Jerry Cohon.”

Speakers at the naming ceremony included President Suresh; Gina Casalegno, associate vice president and dean of student affairs; John Hannon, associate dean of student affairs; James Rohr,

vice chair of the university’s Board of Trustees; Mark Kamlet, provost and executive vice president; Stanley Krowitz, University Center administrator; Dan Gilman, City of Pittsburgh councilman; and Millard McElwee, a junior in civil and environmental engineering.

Hannon drew laughs from the assembled crowd when he shared a memory of Cohon helping members of the Tartan football team trying to move a 1,500-lb. shuffleboard table several hundred feet through the University Center’s basement.

“He whipped off his jacket in a move that was half James Bond and half Don Draper and began assisting us,” Hannon said. “All I could think was ‘boys, for the love of God, do not drop this table on the president’s foot,’ because I simply cannot live down the embarrassment of a headline in the Chronicle of Higher Education reading ‘Carnegie Mellon President Critically Injured in Shuffleboard Accident.’”

Others drew parallels between the building and the man.

“Dr. Cohon’s mission when he was president was to engage students and put them first. The University Center is the heart of the university,” McElwee said. “Dr. Cohon has the biggest heart of anyone that I know, and it is truly evident that his heart is in his work.”

Krowitz recalled poignant University Center moments indelibly etched in the minds of the campus community, from Randy Pausch’s “Last Lecture” to 9/11 when students turned fear into courage, standing in lines for days to donate blood.

“Through it all, one man stood strong like a beacon of light in the darkness, providing hope,” Krowitz said of Cohon.



CMU PRESIDENT SUBRA SURESH AND PRESIDENT EMERITUS JARED COHON LOOK AT A FRAMED IMAGE OF THE UNIVERSITY CENTER SIGNED BY ALL OF ITS STAFF.

The naming ceremony kicked off with a student a capella group singing a rendition of Stevie Wonder’s “Signed, Sealed, Delivered.” Casalegno borrowed a line from the song at the ceremony’s closing as she announced to Cohon, “Signed, sealed, delivered, it’s yours.”

# Inaugural Symposia

## Events Showcase CMU's Work in Innovation, Humanities and Social Sciences

The yearlong celebration of the inauguration of President Subra Suresh as Carnegie Mellon's ninth president included two symposia in April.

### "The Research University and U.S. Economic Growth: Is a New Model Emerging?"

Carnegie Mellon is one of the primary reasons why Pittsburgh is a model for economic prosperity, not only in the United States, but around the world.

At a D.C. event, academic experts and government officials shared the message that innovation-fueled job growth happens when research universities collaborate with government and the private sector to accelerate discoveries from the lab to the marketplace.

"We're grateful that CMU has impact on the common welfare of our country," said Sen. Robert P. Casey Jr. "And one of the reasons you have that impact is because you have not allowed southwest Pennsylvania to wait for the future, you have helped to invent it."

Bruce Katz, vice president and director of the Metropolitan Policy Program for The Brookings Institution, said what the U.S. needs is an economy fueled by innovation.

"What that requires us to do is to shift our growth model in the U.S. from an economy that was really characterized as consumption and debt and financial mischief to an economy that you've built in Pittsburgh," he said.

"You have essentially invented the model, not just for regional transformation but for national transformation . . . You've created in Pittsburgh a new spatial geography of innovation. Because talented workers want to be in places where they can live, work, play; and firms want to be close to other firms and anchor institutions where ideas can be shared and commercialized for the marketplace."

Honorary co-hosts were Sen. Casey, Sen. Pat Toomey and Rep. Mike Doyle.

Doyle said that the biggest lesson to draw from Pittsburgh's renaissance is that economic growth is driven by technological change.

He added, "The best way to promote more rapid economic growth in the country is for the federal government to invest more in research so that we can maintain America's leadership in innovation."

President Suresh, himself a new arrival in Pittsburgh, found the role that research universities like Carnegie Mellon and the University of Pittsburgh play in the economic transformation of the region very appealing. "What happened with Pittsburgh as a model can potentially be used in other parts of the country, perhaps other parts of the world," he said.

Several entrepreneurs from some of Carnegie Mellon's spinout companies were part of the conversation, noting Carnegie Mellon has created more companies per federal research dollar than any other university in the United States.

Andrew Moore, vice president of Google's Pittsburgh engineering office



**ONLINE: WATCH THE DISCUSSIONS AT [WWW.CMU.EDU/SURESH-INAUGURATION/SYMPOSIA/INDEX.HTML](http://WWW.CMU.EDU/SURESH-INAUGURATION/SYMPOSIA/INDEX.HTML).**

who will be returning to CMU as the dean of the School of Computer Science in August, said Google understands that to be the best it has to attract the best people. That's the reason, he said, it chose to open an engineering office in Pittsburgh in 2006.

### "Mapping the Future of the Humanities and Social Sciences"

At the request of Congress, the American Academy of Arts and Sciences commissioned the "Heart of the Matter," a comprehensive report on the current state of the humanities and social sciences that stresses their importance in creating a vibrant, competitive and secure nation.

Carnegie Mellon — which has a long history of the humanities and social



NORMAN AUGUSTINE DISCUSSES THE WORK OF LINDSAY ELLIOTT-FOOSE (DC'14) AT A POSTER PRESENTATION WHERE DIETRICH COLLEGE STUDENTS SHOWCASED RESEARCH PROJECTS.

sciences collaborating with other fields to solve problems — and the American Academy held the first Pittsburgh-area discussion of the report and its implications for improving education and creating a sustainable global society.

Shumway and Kiron Skinner — for a panel discussion moderated by John Lehoczky, dean of the Dietrich College of Humanities and Social Sciences.

"When I first read the 'Heart of the Matter,' I thought, 'that's what we try to do,'" said Fischhoff, the Howard Heinz University Professor of Social and Decision Sciences and Engineering and Public Policy.

Polansky, head of the Department of Modern Languages, shared the promising trend that students are taking more and more advanced language and culture courses, making them more attractive job candidates.

"It's a common concern that majoring in the humanities and social sciences does not directly link to a career path," she said. "But, more than 90 percent of employers agree that a candidate's demonstrated capacity to think clearly, communicate clearly and solve complex problems is more important than their undergraduate major."

Skinner, associate professor of social and decision sciences and director of CMU's Center for International Relations and Politics, highlighted the ways that the humanities and social sciences are poised to make war the option of last resort.

"History, culture, languages, decision sciences, psychology and anthropology are centrally important to blocking war," said Skinner, who organized the discussion. "Arguments win at the end of the day — bullies do not."

Shumway, professor of English and director of the Humanities Center, spoke about how the value of the humanities stems from how they deal with problems that cannot be solved or do not have a single solution.

"Humanities provide a framework to work with interpretation, analysis and judgment — all problems of intellectual value that students encounter in school but also in life," he said.



PRESIDENT SUBRA SURESH (FOURTH FROM LEFT) JOINED LOCAL PITTSBURGH OFFICIALS FOR THE GROUNDBREAKING OF THE NEXT PHASE OF THE BAKERY SQUARE DEVELOPMENT, HOME TO GOOGLE PITTSBURGH, ON APRIL 17. THE DEVELOPMENT HOPES TO ATTRACT NEW BUSINESSES AND CREATE NEW JOBS.

# COMMENCEMENT 2014

## Qatar Graduate First To Visit Campus for ACS Ceremony

■ Kelly Solman

Narcis Jafarian (CMU'14) works hard and is passionate about developing Qatar's business landscape and shaping the country's technology needs.

Jafarian, who received her bachelor's degree in business administration on May 5, was selected from a class of 80 seniors as this year's Andrew Carnegie Society (ACS) Scholar from the Qatar campus. She was the first ACS Scholar from Qatar to attend the ceremony in Pittsburgh, where she received her ACS stole at the home of CMU President Subra Suresh.

ACS Scholars are selected each year by their deans and department heads to represent their class in service and leadership. These students embody CMU's high standards of academic excellence, volunteerism, leadership and involvement in student organizations, athletics or the arts.

"In addition to being an outstanding student in our business administration program, Narcis led new student orientation and served as president of the Debate Society. She has been an active member of the community by attending public lectures, volunteering at events and representing CMU-Q at competitions," said Ilker Baybars, dean of Carnegie Mellon University in Qatar.

"As the Qatar campus celebrates its 10th year, I continue to be impressed by our students and graduates," Baybars added. "Narcis represents the success, achievements and leadership skills demonstrated by the Class of 2014."

Since its inception in 1975, the endowed ACS Scholars program has recognized more than 1,000 students with a monetary award, that supports their academic and personal growth. The students also are asked to work together throughout their senior year to decide how best to contribute a grant of \$8,000 back to the university through student-run clubs and organizations.

By empowering the scholars in this way, the ACS aims to instill a sense of the philanthropic spirit of its namesake in future generations.

"About 20 clubs applied and requested an amount for award, and so we sat together as a group, came up with our own criteria, reviewed each application carefully and decided to award five of the clubs — 1000Plus, TEDxCMU, ECE Outreach, The Frame Gallery and Project Smile — based on our criteria," Jafarian said.

A 10th anniversary celebration event held in March in Doha inspired Jafarian and overwhelmed her with a sense of hope for the future.

CONTINUED ON PAGE EIGHT

## Keynote Speaker, Honorary Degree Recipients Announced

■ Piper Staff

Carnegie Mellon has announced its keynote speaker and honorary degree recipients for its 117th Commencement, beginning at 11 a.m., Sunday, May 18 in Gesling Stadium on the Pittsburgh campus.

This year's keynote speaker is CMU alumnus and Trustee Jeffrey Housenbold (TPR'91), president and CEO of Shutterfly Inc. Honorary degree recipients are Manfred Honeck, music director of the Pittsburgh Symphony Orchestra, John Wells (A'79), one of the most influential and successful writer-producer-directors in American film and television, and Telle Whitney, president and CEO of the Anita Borg Institute for Women and Technology.



**Jeffrey Housenbold**  
President and CEO  
Shutterfly Inc.

Jeffrey Housenbold, an Andrew Carnegie Presidential Scholar, is one of the most successful new-media entrepreneurs in the world with a successful track record of building profitable, online consumer brands by artfully combining commerce and community. As president and CEO, he has been the driving force behind Shutterfly Inc.'s transformation from an online photofinisher into a personal publishing and social expression platform, used every day by tens of millions worldwide to tell their personal stories.

Under Housenbold's leadership, Shutterfly Inc. has been recognized for both its business achievements and its distinctive company culture. Shutterfly Inc. was named as one of the Top Ten Fastest Growing Tech Companies by Forbes magazine, and it has received numerous accolades as a great place to work. Housenbold

has been recognized as an E&Y Entrepreneur of the Year and a Most Admired CEO by the San Francisco Times. He was named one of the "40 Under 40" by both BusinessWeek and Corporate Leader magazines and has been featured in The Wall Street Journal, New York Times, Forbes, Fortune, Bloomberg BusinessWeek and Newsweek. Housenbold is a frequent guest on CNBC, Fox News, Bloomberg, NBC and PBS.

Before joining Shutterfly Inc., Housenbold was vice president of Business Development & Internet Marketing at eBay, where he managed customer acquisition and retention. He also served as vice president of Corporate Development at WinStar Communications and as manager and co-founder of Accenture's Media & Entertainment Strategy Group.

Housenbold serves on the board of directors of Shutterfly, Inc.; Caesars Entertainment Corporation, the world's largest casino entertainment company; Groupon, the leading online marketplace for local deals; and Chegg, the online student hub. He also serves as a special industry adviser to KKR & Co. L.P. Housenbold has formerly served on the board of directors of several leading venture backed companies including Touch Commerce, There Inc., Digital Chocolate and Clover. He has also served on the board of directors of the nationally recognized Children's Discovery Museum of San Jose.

Jeffrey Housenbold is a trustee of Carnegie Mellon University.

CONTINUED ON PAGE SIX



ANDREW CARNEGIE SOCIETY (ACS) BOARD COMMITTEE CHAIR MARY LOUISE LEHOCZKY PRESENTS NARCIS JAFARIAN (CMU'14) WITH HER ACS STOLE FOR GRADUATION. JAFARIAN CELEBRATED GRADUATION WITH HER FELLOW CARNEGIE MELLON IN QATAR CLASSMATES ON MAY 5 IN DOHA.

# Lewis Urges Classmates To Find Their “Chicken Soup”

■ Bruce Gerson

A self-proclaimed “social engineer,” Bryan Lewis (E’13, ’14) aims to build a better future through renewable energy and by finding a greater purpose in his life.

The latter will be the focus of his speech — the first speech he’s ever written and delivered — at commencement as this year’s student speaker. He said his speech doesn’t have an official title, but he calls it “kind of like a ‘Chicken Soup for the Soul.’”

“By extending your hand and bringing someone along, helping them get to where they need to be, you can find a greater purpose in yourself,” said Lewis, who will be receiving his master’s degree in energy science, technology and policy after earning his bachelor’s degree in civil and environmental engineering and engineering and public policy a year ago.

“At the end of the day, the people who really are going to be remembered in this lifetime are the people who make those connections, the people who help to bring someone along. That leaves a legacy,” he said.

Lewis wants to encourage his fellow graduates to apply his message and pay it forward.

“When I saw the student speaker ad on a table tent, I thought ‘I should do this.’ I knew it was going to be hard, but I have the passion, the will and the

purpose to give this message.

“That greater purpose is what I want people to leave with. I want people to question, ‘what have I done?’ ‘What can I do?’ ‘And how can I go about doing it?’”

Lewis and his friends in the High Council, a group of all male, black 2013 graduates, have walked his talk at CMU. Their unofficial organization had meetings to discuss their legacy and what they could leave behind “to fulfill a greater purpose.”

“We brought in our younger friends, freshmen and sophomores and gave them advice. We gave them the ‘dos’ and ‘don’ts.’ We mentored them. We shared our own experiences to try to influence theirs.

“I think it created a spark and they’ll take that and go back and do the same when they’re seniors,” Lewis said.

Lewis, who has been a member of the National Society of Black Engineers, a member of the Engineering and Public Policy Student Curriculum Committee and the College of Engineering’s First-Year Advisory Board, also leaves CMU with an academic legacy.

As a junior he committed himself to the energy industry, specifically renewable energy, after hearing about Solyndra, the now-defunct solar panel manufacturing company. In addition to

focusing his classwork on energy issues, he secured a solar energy internship with the U.S. Department of Energy and an internship at the Center for American Progress, where he wrote blogs and white papers on renewable energy finance.

“My voice was being heard. That was a stepping-stone to what I’m doing now,” he said.

Professionally, Lewis sees his greater purpose in helping to provide energy-efficient and sustainable energy to the poor and disadvantaged.

“I want to start a venture to figure out financing methods and policy schemes to get clean energy, renewable energy and energy-efficient supplies to lower-income communities. We need innovative third-party leasing agreements, in which people can lease supplies rather than buy them,” he said.

Lewis points to several staff and faculty who have helped him along the way, particularly Deanna Matthews, assistant teaching professor of Engineering and Public Policy and associate department head, and her husband, Scott Matthews, professor of civil and environmental engineering and EPP.

“They have always believed in me and given me the confidence to achieve, even in the face of adversity,” he said. “Also, the Civil Engineering Depart-



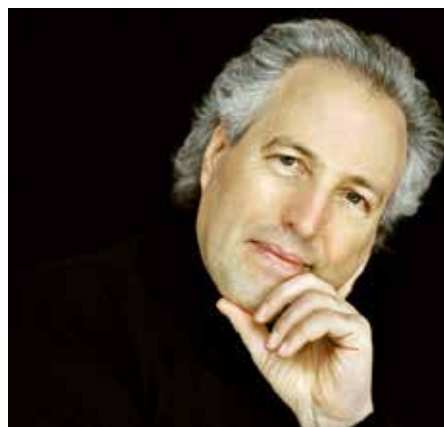
BRYAN LEWIS (E’13, ’14)

ment staff are all amazing people — Andrea Francioni Rooney, Mireille Mobley and company — the best staff on campus.”

Lewis said it was the people at CMU, the university environment and the accepting community that reeled him in five years ago during his recruiting visit. He remembers playing a pick-up basketball game in Wiegand Gym and recalls winning the game in which he amazed his teammates and competitors by dunking the ball.

He hopes to end his CMU career the same way — with a slam-dunk of a speech on commencement day.

## Honorary Degree Recipients Are Inspiring CONTINUED FROM PAGE FIVE



**Manfred Honeck**  
Music Director, Pittsburgh Symphony Orchestra  
Doctor of Fine Arts

Manfred Honeck has been music director of the Pittsburgh Symphony Orchestra since 2008. He has thrilled sellout crowds in the Pittsburgh Symphony’s home at Heinz Hall and around the globe with his emotionally stirring interpretations of Mahler, Beethoven, Strauss, Bruckner and other symphonic masters.

He also has opened up the Pittsburgh Symphony Orchestra to a wider audience by creating new opportunities to experience symphonic music, including a series of “Music for the Spirit” concerts around the city, a popular program of Strauss waltzes every Thanksgiving, and an annual “Composer in Residence” program that explores the work of contemporary American composers. He has led the Pittsburgh Symphony in acclaimed performances across Europe and the Far East. His work with the Pittsburgh Symphony has been captured in several recordings, among them is Mahler’s Symphony No. 4 that won a 2012 Classical Music Award. These recordings are available on Japanese label Exton. Honeck’s successful work with the Pittsburgh Symphony Orchestra is now captured by Reference recordings. The first super audio CD — of Strauss tone poems — was released in fall 2013 and received rave reviews.

Born in Austria, Honeck received

his musical training at the Academy of Music in Vienna. He began his career as assistant to Claudio Abbado in Vienna and went on to conducting posts in Zurich, Leipzig and Oslo. From 2000 to 2006, he was music director of the Swedish Radio Symphony Orchestra, and he is principal guest conductor of the Czech Philharmonic Orchestra. Honeck also is in demand as a guest conductor with opera companies throughout Europe.

As a sought-after guest conductor, Honeck has performed with the leading orchestras of the world, including the Berlin Philharmonic, the Vienna Philharmonic, the Royal Concertgebouw Orchestra, the London Symphony Orchestra, the New York Philharmonic, the Chicago Symphony Orchestra, the Boston Symphony Orchestra and the Philadelphia Orchestra. The New York Times has called his conducting “compelling” and “luminous,” and noted that orchestra members seemed “inspired” by Maestro Honeck’s direction.

**John Wells (A’79)**  
Writer, Producer and Director  
Doctor of Fine Arts

John Wells is one of the most influential and successful writer-producer-directors working in American film and television today.

He was the creative force behind two of television’s most popular and acclaimed programs of the past two decades, “ER” and “The West Wing.” “ER” was one of television’s most-watched dramas for 15 seasons and won



## Schedule of Events

Commencement weekend at Carnegie Mellon involves much more than the ceremony itself. Below is a list of events for May 17-18.

### Saturday, May 17

**8 - 9 a.m.**

**Phi Beta Kappa Honor Society Initiation Ceremony**

McConomy Auditorium, first floor, CUC  
An optional, complimentary breakfast will precede the ceremony at 7:15 a.m. in the Connan Room, first floor, CUC.

**8 a.m. - 2 p.m.**

**Commencement Welcome Area**

Wean Commons, first floor, CUC

**First Aid Area**

Athletic Equipment Desk, first floor, CUC

**8 a.m. - 8 p.m.**

**Cap & Gown Distribution Open**

McKenna/Peter/Wright Room, second floor, CUC

**9:30 a.m.**

**Navy ROTC Commissioning Ceremony**

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

**10 a.m.**

**Honors Ceremonies**

Various locations across campus.

**10:30 a.m.**

**Various Diploma Ceremonies**

Specific times and locations are listed on page 8.

**11:30 a.m.- 12:30 p.m.**

**Human-Computer Interaction Institute (HCII) Undergraduate Presentation**

Room 7500, Wean Hall  
Join the HCII graduates as they present their work for families and peers.

**4 - 6 p.m.**

**CMU Graduating Student Reception**

Alumni House  
The CMU Alumni Association will host a reception for all graduating students and their families.

**5 - 7 p.m.**

**Carnegie Mellon Advising Resource Center (CMARC) Reception**

Singleton Room, fourth floor, Roberts Engineering Hall

**7 p.m.**

**Robing for Doctor's Hooding Ceremony Participants**

Rangos Hall, second floor, CUC

**8 p.m.**

**Doctor's Hooding Ceremony**

Wiegand Gym, first floor, CUC

### Sunday, May 18

**7:30 a.m.**

**Various Diploma Ceremonies**

Specific times and locations are listed on page 8.

**8 - 11 a.m.**

**Cap & Gown Distribution Open**

McKenna/Peter/Wright Room, second floor, CUC

**8 a.m. - 2 p.m.**

**Commencement Welcome Area**

Wean Commons, first floor, CUC

**First Aid Area Open**

Athletic Equipment Desk, first floor, CUC

**8:30 - 10 a.m.**

**School of Computer Science Breakfasts**

**SCS Undergraduate Breakfast**

Perlis Atrium, third floor, Newell-Simon Hall

**SCS Graduate Breakfast**

Collaborative Commons, sixth floor, Gates & Hillman Centers

**10 a.m.**

**Robing for Commencement Participants**

Various locations across campus.

**10:15 a.m.**

**Procession of Graduates**

**11 a.m.**

**Main Commencement Ceremony**

Gesling Stadium

**Noon - 5 p.m.**

**Cap & Gown Return Open**

McKenna/Peter/Wright Room, second floor, CUC

**12:30 p.m.**

**Various Diploma Ceremonies**

Specific times and locations are listed on page 8.

CUC= Cohon University Center

23 Emmy awards. "The West Wing," a drama about the lives of White House staffers, ran for seven seasons and won four Outstanding Drama Series Emmys, 23 other Emmys and many additional awards. Wells' most recent work in television includes the TNT series "Southland" and Showtime's "Shameless."

Wells and his colleagues at John Wells Productions have produced a number of recent notable films, including "Duma," "White Oleander" and "The Good Thief." In 2013, Wells produced and directed "August: Osage County," which starred Meryl Streep and Julia Roberts, and received two Academy Award nominations.

He also has brought award-winning works to the stage, including productions of "Judgment," "Balm in Gilead," "Battery" and "She Also Dances."

Wells has continued his engagement with the School of Drama at Carnegie Mellon, returning often for visits. In 2010, he endowed the John Wells

Directing Program at the school.

Wells was awarded the 2005 David Susskind Achievement Award in Television from the Producers Guild of America, and in 2008 was awarded the prestigious Paddy Chayefsky Award by the Writers Guild of America for his work in television. He also has served as a president of the Writers Guild of America.

**Telle Whitney**

**President and CEO, Anita Borg Institute Doctor of Science and Technology**

Telle Whitney has served as president and CEO of the Anita Borg Institute for Women and Technology (ABI) since 2002. ABI provides support and networking for women in technical fields and "was founded on the belief that women are vital to building technology that the world needs." Under Whitney's leadership, ABI has expanded opportunities for women,



and opened the door for women to make new and varied contributions to the computing professions.

Whitney has 20 years of experience in the semiconductor and telecommunications industries. She has held senior technical management positions with Malleable Technologies (now PMC-Sierra) and Actel Corporation. She served as the secretary treasurer of the Association for Computing Machinery (ACM) in 2003-2004, and is currently co-chair of the ACM Distinguished Member Committee.

Whitney has been a member of the National Science Foundation Committee on Equal Opportunities in Science and Engineering, and the Computer and Information Science and Engineering Directorate Advisory Committee, and is a co-founder of the National Center for Women and Information Technology. She serves on advisory boards for Caltech, the California Institute for Telecommunications and Information Technology, and Illuminate Ventures.

Whitney has received numerous awards and honors, including the ACM Distinguished Service Award, the Marie Pistilli Women in EDA Achievement Award and the Women's Venture Fund Highest Leaf Award. She was also one of the San Jose Business Journal's "Top 100 Women of Influence."

Whitney received her Ph.D. from Caltech and her bachelor's degree from the University of Utah, both in computer science.

## Diploma Ceremonies

Graduates will receive their diplomas at department diploma ceremonies. Caps and gowns are required.

### Architecture

Saturday, May 17  
Ceremony: 2 p.m.  
Philip Chosky Theater, Purnell Center  
Reception: following ceremony  
Great Hall, CFA

### Art

Sunday, May 18  
Reception: 12:30 p.m.  
Regina Gouger Miller Gallery,  
Purnell Center  
Ceremony: 3 p.m.  
Philip Chosky Theater, Purnell Center

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

Sunday, May 18  
Ceremony: 8:30 a.m.  
Kresge Theater, CFA  
Reception: 9:30 a.m.  
Alumni Concert Hall, CFA

### Biological Sciences \*

Saturday, May 17  
Ceremony: 2 p.m.  
Auditorium, Mellon Institute  
4400 Fifth Ave.  
Reception: following ceremony  
Social & Conference Rooms,  
Mellon Institute

### Biomedical Engineering

Saturday, May 17  
Ceremony: Noon  
McConomy Auditorium, CUC  
Reception: 1 p.m.  
Schatz Dining Room, CUC

### Business Administration (Bachelor's) +

Sunday, May 18  
Reception: 12:30 p.m.  
Ceremony: 2 p.m.  
Soldiers & Sailors Memorial Hall  
4141 Fifth Ave.

### Business Administration (Master's & Doctor's)

Saturday, May 17  
Ceremony: 2 p.m.  
Reception: following ceremony  
Soldiers & Sailors Memorial Hall  
4141 Fifth Ave.

### Center for the Neural Basis of Cognition

Saturday, May 17  
Ceremony: 4 p.m.  
Reception: 4:30 p.m.  
Connan Room, CUC

### Chemical Engineering +

Sunday, May 18  
Ceremony: 2 p.m.  
Carnegie Lecture Hall, Carnegie Museum  
4400 Forbes Ave.  
Reception: following ceremony  
Phipps Conservatory  
1 Schenley Park  
700 Frank Curto Dr.

### Chemistry +

Sunday, May 18  
Ceremony: 2 p.m.  
Auditorium, Mellon Institute  
4400 Fifth Ave.  
Reception: following ceremony  
Social & Conference Rooms,  
Mellon Institute

### Civil & Environmental Engineering +

Sunday, May 18  
Reception: 12:30 p.m.  
Ceremony: 2 p.m.  
University of Pittsburgh Alumni Hall  
4227 Fifth Ave.

### Design

Saturday, May 17  
Ceremony & Reception: 3 p.m.  
Rangos Hall, CUC

### Drama

Sunday, May 18  
Ceremony: 1 p.m.  
Philip Chosky Theater, Purnell Center  
Reception: following ceremony  
Lobby, Purnell Center

### Economics +

Sunday, May 18  
Reception: 12:30 p.m.  
Ceremony: 2 p.m.  
Soldiers & Sailors Memorial Hall  
4141 Fifth Ave.

### Electrical & Computer Engineering \*

Sunday, May 18  
Ceremony: 12:30 p.m.  
Wiegand Gymnasium, CUC  
Reception: following ceremony  
Tartans Pavilion, Resnik House

### Energy Science, Technology & Policy \*

Sunday, May 18  
Ceremony & Reception: 8 a.m.  
Singleton Room, Roberts  
Engineering Hall

### Engineering & Public Policy \*

Sunday, May 18  
Ceremony & Reception: 7:30 a.m.  
Rangos 2 and 3, CUC

### Engineering & Technology Innovation Management \*

Sunday, May 18  
Ceremony & Reception: 7:30 a.m.  
Rangos 2 and 3, CUC

### English

Saturday, May 17  
Ceremony: 2:30 p.m.  
McConomy Auditorium, CUC  
Reception: following ceremony  
Schatz Dining Room, CUC

### Entertainment Technology Center

Sunday, May 18  
Reception, followed by dinner: 4 p.m.  
Ceremony: following dinner  
East Club Lounge, Heinz Field  
100 Art Rooney Ave.

### Heinz College \*

Saturday, May 17  
Ceremony: 2 p.m.  
Carnegie Music Hall, Carnegie Museum  
4400 Forbes Ave.  
Reception: following ceremony  
Carnegie Music Hall Foyer,  
Carnegie Museum

### History

Sunday, May 18  
Breakfast Reception: 7:30 a.m.  
Ceremony: 8:30 a.m.  
Gregg Hall, Room 100, Porter Hall

### Information Networking Institute

Sunday, May 18  
Ceremony: 3 p.m.  
Reception: 4 p.m.  
Rodef Shalom Congregation  
4905 Fifth Ave.

### Information Systems \*

Saturday, May 17  
Ceremony: 6 p.m.  
Philip Chosky Theater, Purnell Center  
Reception: following ceremony  
Lobby, Purnell Center

### Integrated Innovation/ProdCUC Development

Saturday, May 17  
Ceremony: 4:30 p.m.  
Reception: following ceremony  
Integrated Innovation Institute  
4612 Forbes Ave.

### Materials Science & Engineering+

Sunday, May 18  
Ceremony: 12:30 p.m.  
Reception: following ceremony  
Winchester Thurston School Auditorium  
555 Morewood Ave.

### Mathematical Sciences

Sunday, May 18  
Ceremony: 1 p.m.  
McConomy Auditorium, CUC  
Reception: following ceremony  
Perlis Atrium, Newell-Simon Hall

### Mechanical Engineering \*

Saturday, May 17  
Ceremony: 2 p.m.  
Wiegand Gymnasium, CUC  
Reception: following ceremony  
Tartans Pavilion, Resnik House

### Modern Languages

Sunday, May 18  
Ceremony: 8:30 a.m.  
Rangos 1, CUC  
Reception: following ceremony  
Skibo Coffeehouse, CUC

### Music

Sunday, May 18  
Ceremony: 12:30 p.m.  
Great Hall, CFA  
Reception: following ceremony  
Alumni Concert Hall, CFA

### Philosophy

Sunday, May 18  
Breakfast Reception: 8 a.m.  
Lower Level Coffee Lounge, Baker Hall  
Ceremony: 9 a.m.  
Giant Eagle Auditorium, Baker Hall

### Physics

Sunday, May 18  
Ceremony: 12:30 p.m.  
Reception: following ceremony  
Room 7500, Wean Hall

### Psychology

Sunday, May 18  
Ceremony & Reception: 12:30 p.m.  
Rangos Hall, CUC

### School of Computer Science +

Sunday, May 18  
Ceremony: 1:30 p.m.  
Reception: following ceremony  
Carnegie Music Hall, Carnegie Museum  
4400 Forbes Ave.

### Silicon Valley

The diploma ceremony will take place in August on the Silicon Valley campus.

### Social & Decision Sciences

Sunday, May 18  
Breakfast Reception: 7:30 a.m.  
Schatz Dining Room, CUC  
Ceremony: 8:30 a.m.  
McConomy Auditorium, CUC

### Statistics

Sunday, May 18  
Ceremony: 12:30 p.m.  
Gregg Hall, Room 100, Porter Hall  
Reception: following ceremony  
Lower Level Coffee Lounge, Baker Hall

### Student-Defined Majors (Dietrich College)

Sunday, May 18  
Ceremony: 9 a.m.  
Reception: following ceremony  
Adamson Wing, Room 136A  
(upper level lobby), Baker Hall

\* Guests are limited. Contact the department or see [cmu.edu/commencement](http://cmu.edu/commencement) for details.  
+ Complimentary shuttle service will be available to transport guests to the ceremony.

Walking and driving directions to off-campus sites will be available at the Commencement Welcome Area.  
CUC = Cohon University Center  
CFA = College of Fine Arts Building

## ACS Ceremony

CONTINUED FROM PAGE FIVE

"It was a brilliant event, focused on our alumni and what they've done, where they've gone," Jafarian said. "Two of the alumni who are doing extremely well were my teaching assistants during my freshman year. Sara Abbas (CMU'12) is working at Nestlé, and Belal al Kadhi (CMU'11) is working at GE. That was incredibly inspiring to me to see them very successful, touching and brilliant at the same time. All of our alumni who have gone on to make an impact in the world are very impressive, and this is just our first 10 years."

Jafarian wants to work in the banking sector or consulting.

"Technology companies are completely different from other companies in the way that they handle their books. I find that really interesting. The CMU Qatar campus doesn't have that many alumni in the banking sector so I was hoping to stay in the Middle East," Jafarian said.

While on the Pittsburgh campus Jafarian attended Spring Carnival, which was celebrating its own anniversary — 100 years.

"The Pittsburgh campus is huge, and there is so much happening here that I really like," she said.



came when Arcangel, a self-described “Warhol fanatic and lifelong computer nerd,” learned about Warhol’s Amiga experiments from a 1985 Commodore infomercial on YouTube. Acting on a hunch, and with the support of CMOA curator Tina Kukielski, Arcangel approached the AWM in December 2011 regarding the possibility of restoring the

Amiga hardware in the museum’s possession, and cataloging any files on its associated diskettes.

In April 2012, Arcangel contacted Golan Levin, a CMU art professor and director of the FRSCI, a laboratory that supports “atypical, anti-disciplinary and inter-institutional” arts research. Offering a grant to support the investigation

through the STUDIO’s Frank-Ratchye Fund for Art @ the Frontier, Levin connected Arcangel with the CMU Computer Club, a student organization that had gained renown for its expertise in “retrocomputing,” or the restoration of vintage computers.

CMU Computer Club members determined that even reading the data from the diskettes entailed significant risk to the contents, and would require unusual tools and methodologies. By February 2013, in collaboration with collections manager Amber Morgan and other AWM archivists, the club had completed a plan for handling the delicate disk media, and gathered at The Andy Warhol Museum to see if any data could be extracted. The Computer Club set up a cart of exotic gear, while a video crew from the Hillman Photography Initiative, under the direction of Kukielski, followed their progress.

It was not known in advance whether any of Warhol’s imagery existed on the floppy disks — nearly all of which were system and application diskettes onto which, the team later discovered, Warhol had saved his own data. Reviewing the disks’ directory listings, the team’s initial excitement on seeing

promising file names like “campbells.pic” and “marilyn1.pic” quickly turned to dismay, when it emerged that the files were stored in a completely unknown file format, unrecognized by any utility. Soon afterward, however, the club’s forensics experts had reverse-engineered the unfamiliar format, unveiling 28 never-before-seen digital images that were judged to be in Warhol’s style by the AWM’s experts. At least 11 of these images featured Warhol’s signature.

The images depict some of Warhol’s best-known subjects — Campbell’s® soup cans, Botticelli’s Venus, and self-portrait, for example — articulated through uniquely digital processes such as pattern flood fills, palletized color and copy-paste collage. “What’s amazing is that by looking at these images, we can see how quickly Warhol seemed to intuit the essence of what it meant to express oneself, in what then was a brand-new medium: the digital,” Arcangel said.

The team’s efforts are documented in the Hillman Photography Initiative’s new short film, “Trapped: Andy Warhol’s Amiga Experiments,” which will be available online at <http://nowseethis.org> on May 12.

**ANDY WARHOL (AMERICAN, 1928-1987)**

THE ANDY WARHOL MUSEUM, PITTSBURGH; FOUNDING COLLECTION, CONTRIBUTION THE ANDY WARHOL FOUNDATION FOR THE VISUAL ARTS, INC. (C) 2014 THE ANDY WARHOL FOUNDATION FOR THE VISUAL ARTS, INC. / ARTISTS RIGHTS SOCIETY (ARS), NEW YORK



DIGITAL IMAGE, FROM DISK 1998.3.2129.3.22 - CAMPBELL'S SOUP CAN



DIGITAL IMAGE, FROM DISK 1998.3.2129.3.22 - BOTTICELLI'S VENUS



DIGITAL IMAGE, FROM DISK 1998.3.2129.3.4 - A SELF-PORTRAIT

## Energetic Announcement

### Intelligent Workplace Serves as Backdrop for Launch of Energy Loan Program

■ Michelle Bard

An intelligent space to announce an innovative program.

That’s why the School of Architecture’s Robert L. Preger Intelligent Workplace served as the space where Rob McCord, Pennsylvania’s state treasurer, announced a new program to help homeowners find lower-cost loans for home energy-efficiency improvements. The program — Warehouse for Energy Efficiency Loans (WHEEL) — is an innovative financing platform that creates a national secondary market for low-cost residential energy-upgrade loan funding.

The Intelligent Workplace, perched atop Margaret Morrison Carnegie Hall and flooded with natural light, is a field laboratory for energy-efficiency technologies — a building McCord called “inspiring.”

McCord likened WHEEL’s goals to those of the School of Architecture, which he said “has built a brand as the best R&D institution in the country — possibly the world — for sustainable buildings.”

WHEEL is the product of a collaboration between national leaders in finance and energy, the Pennsylvania Treasury Department, Citigroup, Renewable Funding, the Energy Programs Consortium, the National Association of State Energy Officials and the

U.S. Department of Energy. The Energy, Ford, Rockefeller, Surdna and William Penn foundations provided key financial support. The Commonwealth of Kentucky has signed on as a WHEEL charter member.

Steve Lee, head of CMU’s School of Architecture, called the Intelligent Workplace a “living and lived-in laboratory” and described its four decades of groundbreaking energy research. It is home to the Center for Building Performance and Diagnostics (CBPD), which has made advances in user comfort and satisfaction, organizational flexibility, technological adaptability, and energy and environmental effectiveness.

The CBPD finds, tests and integrates the world’s best energy-saving products, developing conservation guidelines and demonstrating them through a range of commercial and residential projects. Many of the faculty members are among the more than 100 CMU professors and researchers who are part of the Wilton E. Scott Institute for Energy Innovation.

Invoking the Intelligent Workplace’s inventiveness and commitment, McCord urged other state governments to follow WHEEL’s lead and “embrace financial innovation in a way that actually serves people, much in the way that this building does.”

# Sum of Success

## Putnam Team Places Second

■ Jocelyn Duffy

Carnegie Mellon has been adding to its recent achievements in the premier mathematics contest for undergraduate students.

Not only did CMU's team place second in the Mathematical Association of America's 74th William Lowell Putnam Competition, but 35 students scored among the top 10 percent, the second most of any university.

This marks the third consecutive year that the Carnegie Mellon team has placed among the top five teams. Only 11 other universities have placed in the top five more than twice since 1990.

"Repeated success in the Putnam Competition makes Carnegie Mellon shine like a beacon, showing the extreme talent that gathers here," said Po-Shen Loh, assistant professor of mathematical sciences and the team's coach. "It is our hope that by bringing ambitious students together, they can work with each other to achieve success for themselves, the university and the region."

In December, more than 4,000 American and Canadian undergraduates from 557 institutions were given

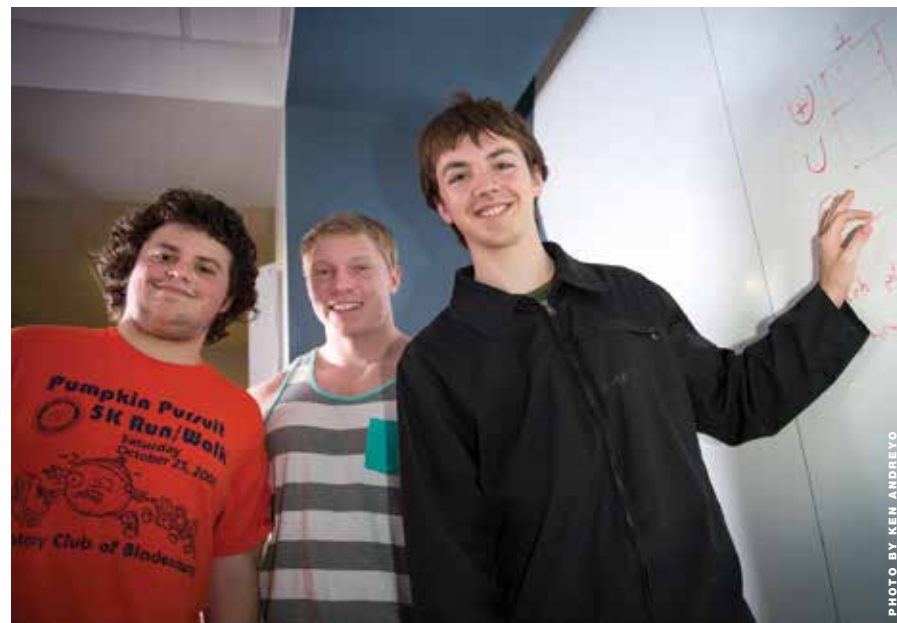
six hours to solve 12 complex problems relying on creative thinking and mathematics concepts. Results were sent to participating universities at the beginning of April.

CMU's official university team included sophomore Science and Humanities Scholar Linus Hamilton, first-year mathematical sciences student Thomas Swayze and junior mathematical sciences major Michael Druggan. An additional 160 other CMU students participated in this year's competition.

"It's not the six-hour test that's important," Hamilton said. "It's chatting with your friends about the problems afterward."

The official team members are all Knaster-McWilliams Scholars. The Knaster-McWilliams Scholars program, which has been funded through the generosity of a physics alumnus and a mathematics and electrical engineering alumnus, is one of only a few scholarship-supported programs in the country that also is paired with an honors program that features increased access to faculty and early research opportunities.

"Our standings in the Putnam Competition paired with our innovative academic and scholarship program



CMU MATH WIZARDS: LINUS HAMILTON, MICHAEL DRUGGAN AND THOMAS SWAYZE

bring the best young minds to Carnegie Mellon. It's exciting for us to watch these students succeed, and we can only guess that they will continue to exceed our expectations not only while they are students, but also as they venture into the workforce," said John Mackey, associate head of the Mathematical Sciences Department.

The Carnegie Mellon team placed

fifth in 2012 and second in 2011, and had top five finishes in 1987, 1949 and 1946. In the history of the competition, only 13 other universities have placed in the top five more than five times.

Carnegie Mellon's Department of Mathematical Sciences in the Mellon College of Science will receive \$20,000 for the second-place finish, and each team member will receive \$800.

## NEW DEPARTMENT HEADS

■ Shilo Rea

### Danks To Lead Philosophy



DAVID DANKS

David Danks has been selected to head Carnegie Mellon's Department of Philosophy, effective July 1.

Danks, associate professor of philosophy and psychology, succeeds Richard Scheines, who is stepping down to become dean of the Dietrich College of Humanities and Social Sciences.

"David Danks is an outstanding researcher and instructor, whose work at the intersection of philosophy and psychology is unrivaled and novel," said John Lehoczky, dean of the Dietrich College. "Carnegie Mellon's Department of Philosophy is unlike any program of its kind in the U.S. because of its emphasis on research that directly impacts the real world in areas such as computer science, math, statistics, psychology, bioethics and human rights. The department further established its unique focus and strengthened its international reputation under Richard Scheines' tenure, and I am certain that

David will work to ensure that philosophy will be a premier department for many years to come."

Danks has been on the CMU faculty since 2003. The majority of his research involves computational cognitive science and focuses on the nature of cognitive representations and the role that goals and challenges play in learning and reasoning.

In 2008, Danks received a coveted James S. McDonnell Foundation Scholar Award to pursue his work on integrated causal cognition, concepts and decision making. He began by working to develop a framework for understanding exactly what happens in these types of cognition. His findings will be released in a forthcoming book, "Unifying the Mind: Cognitive Representations as Graphical Models," that MIT Press will publish later this year.

Another area of Danks' research centers on learning causal structure from time series data, such as the data gathered in neuroimaging research. Last fall, he received a three-year NSF grant to expand the study with Sergey Plis from the Mind Research Network at the University of New Mexico.

### Genovese Promoted in Statistics



CHRISTOPHER R. GENOVESE

Carnegie Mellon has selected Christopher R. Genovese to head its Department of Statistics, a global leader in applying statistics to many areas of science, technology, policy and education, effective July 1. Genovese, professor of statistics, succeeds Mark Schervish, who has served as department head for the past 10 years.

"The Department of Statistics is central to several of Carnegie Mellon's major strategic initiatives — which also reflect many of the central problems facing the world today, such as data science, brain science, learning science, cybersecurity and privacy, computational biology, genetics and cosmology," said John Lehoczky, dean of the Dietrich College. "Chris Genovese is a truly brilliant applied and theoretical statistician who is ideally suited to lead the department at a time when statistical science is

rapidly evolving to meet the challenging demands of 'big data' and a wide array of scientific problems. Under his leadership, I am confident that the department will continue its international prominence."

Genovese joined Carnegie Mellon in 1994. His research focuses on solving complex and high-dimensional problems in the sciences. His work has produced new methods and results in neuroscience, evolutionary biology, learning science and cosmology/astrophysics.

Genovese is a fellow of the American Statistical Association and the Institute of Mathematical Statistics. He has been awarded funding from numerous agencies, including the National Science Foundation, the National Institutes of Health, NASA and the Department of Energy. He is a recipient of a CAREER Award from the National Science Foundation and a Shannon Award from the National Institutes of Health.

Genovese also has been active as an educator, both at the graduate and undergraduate levels. He has created several new courses and has consistently innovated in instructional design.

# CMU Students Lend a Helping Hand in Honduras

■ Stephanie Williams

Spending time working in medical clinics in Honduras isn't the typical spring break vacation for most college students, but it was a spiritually fulfilling one for 28 from CMU.

Nicolas Zuniga-Penaranda (SHS'14), Lanya Tseng (DC'15) and Nicole Huang (E'16) were among students who traveled throughout communities in Honduras as part of the Carnegie Mellon chapter of Global Medical Brigades.

"For me, these trips have really instilled a sense of global community," Tseng said. "After being with Global Medical Brigades for three years now, I feel like when I go back, I have some kind of connection with all these places. I don't feel like I'm just going to save lives, but rather I'm helping people that I have a genuine relationship with."

Two dentists, one physician, one gynecologist and a pharmacist were among the Honduran doctors who accompanied the students as they assisted with medical clinics in Pueblo Nuevo and Apacilagua. Cardiologist Jose Pacheco, father of chapter member Esteban Pacheco (E'15), traveled to Honduras with the students to help out.

"While talking with [my father] about the two different communities, I got to really understand how even a small amount of infrastructure and money can change the effectiveness of medicine," Pacheco said. "I saw how my father tried his best to address what he could, but it was clear that continued support or changes in living arrangements would make the largest difference."

Huang said that the clinic saw

people with colds, fungal infections, parasites and neurological problems among other ailments.

"It was amazing to see how diverse the needs of the people were," she said, "but also how closely the needs followed certain trends."

Patients started out at the triage station, where they told two Carnegie Mellon students about their symptoms and conditions. After the students assessed them, the patients were sent to consultation stations where they received a diagnosis and a precise treatment plan.

Roughly \$90,000 worth of medication and dental supplies were donated for the effort. Students collected the supplies from Rite-Aid, Pittsburgh-area dentists and pharmacists, and non-profit organizations including Brother's Brother and Global Links.

"It was really about empowering the communities. I looked around the clinic and it was mostly Honduran people directing the effort. They just needed to know what direction to go," Zuniga-Penaranda said.

The experience has helped Zuniga-Penaranda with his own direction. After graduation this year, he plans to work for AmeriCorps and apply to medical school.

In addition to the medical clinics, students led charlas, which means "chat" in Spanish. They helped stress the importance of health care and reiterated the significance of healthy living. Children from the communities went to a dental-focused discussion, in which



KONYIN ADEWUMI (DC'16), ESTEBAN PACHECO (E'15), ASH SANKAR (S'16) AND ELISA PABON (S'16) COUNT PILLS TO TAKE TO A CLINIC.

Carnegie Mellon students demonstrated how the children should floss and brush their teeth. The children received dental kits consisting of toothbrushes, toothpaste and dental floss.

Adults went to a separate discussion led by trained health workers from the community. There they learned about topics such as diabetes, high blood pressure and how to treat drinking water.

"One of the biggest impacts we can have is not so much doing [tooth] extractions or giving people medicine, but encouraging education," Zuniga-Penaranda said. "Through education, we can inform patients on how to better themselves so we see less and less of them each year."

Along with the medical clinics and informational discussions, four days were spent in El Junquillo building trenches and laying down piping to help create a clean water facility that could provide fresh drinking water to more than 90 households throughout the community.

"It makes you really appreciate the standard of living in the U.S.," Huang said.

Not only did these Carnegie Mellon students help people in Honduras, they felt that they benefited from the trip, too.

"It was a two-way street. The people in the Honduran communities gave something back to us that you can't get anywhere else," Huang said.

## Decade of Discovery

### Gindroz Prize Winners Reunite To Share Experiences

■ Pam Wigley



EIGHT OF THE GINDROZ PRIZE WINNERS GATHERED IN APRIL. THEY WERE: (BACK ROW, LEFT TO RIGHT) PETER SALIM, CHRISTIAN KRIEGESKOTTE, KAITLIN MICIUNAS, JOSHUA CUMMING, ALLYSON EDINGTON; (FRONT ROW) TALIA PERRY, EMMA HANCOCK AND WERONIKA BALEWSKI.

Marilyn (A'73) and Ray Gindroz (A'65) have shared a lifelong love of travel.

The couple met in Rome and after a whirlwind 11-month romance, they married. They will celebrate 47 years together on May 27.

"Our lives were changed by travel," Marilyn said. "We believe student travel is a very important part of an artist's development."

The Marilyn and Ray Gindroz Foundation Board of Directors celebrated 10 years of Gindroz Travel/Study Prize Winners with a celebration and reunion in April at Urban Design Associates, the firm for which Ray Gindroz served as a founding partner.

Eight of the 10 winners were on hand to share their memories of how the Gindroz Prize helped to further their education and, ultimately, their careers.

The prize supports and encourages study abroad opportunities to enhance the student experience in the schools of

Music and Architecture. Marilyn Gindroz earned her master's degree from the School of Music in 1973. Ray earned his master's degree from the School of Architecture in 1965. He was a Fulbright scholar visiting Rome in June 1966, when he met Marilyn through a friend as she was traveling abroad.

#### Gindroz/Travel Study Prize Winners:

- 2014** Allyson Edington (A'14), music
- 2013** Peter Salim (A'15), architecture
- 2012** Talia Perry (A'13), architecture
- 2011** Weronika Balewski (A'12), music
- 2010** James Harvestus Locus III (A'11), music
- 2009** Kaitlin Miciunas (A'11), architecture
- 2008** Christian Kriegeskotte (A'03, '09), music
- 2007** Michael O'Gieblyn (A'07), music
- 2006** Joshua Cummings (A'08), architecture
- 2005** Emma Hancock (A'06), music

# Google Vice President Returns as SCS Dean

■ Piper Staff

Google Vice President Andrew W. Moore has been selected as the new dean of the renowned School of Computer Science at Carnegie Mellon, effective this August.

Moore, a distinguished computer scientist with expertise in machine learning and robotics, served as a professor of computer science and robotics at CMU before being named founding director of Google's Pittsburgh engineering office in 2006.

"Ever since college I have been inspired by the world-changing ideas and technologies that come out of CMU. I'm privileged to return to the School of Computer Science in this new role," Moore said.

Moore's appointment adds further momentum to Carnegie Mellon President Subra Suresh's initiatives aimed at enhancing the connections among CMU's world-renowned research, its innovative and entrepreneurial culture, and expanding interactions with industry and government.

"Andrew Moore combines an expansive vision, scientific expertise and leadership strength that make him extraordinarily well-suited to be dean of the School of Computer Science," President Suresh said.

"As computing grows ever more critical to our global society, the scope



PRESIDENT SUBRA SURESH AND CURRENT DEAN RANDAL BRYANT WELCOME ANDREW MOORE (CENTER) BACK TO CMU.

of SCS and its importance to the world will continue to expand, and its impact on the human condition will be more evident. Andrew is particularly well positioned to lead the school at this time."

Celebrating its 25th anniversary this year, SCS's graduate program has been ranked by U.S. News and World Report as No. 1 since 2011, and is widely regarded as one of the best computer science programs in the world. CMU scholars Alan Perlis, Allen Newell and Nobel Prize winner Herbert Simon were among the founding fathers of the discipline of computer science. Moreover, CMU is home to 12 winners of the Turing Award,

the highest honor in computer science research.

Google opened its Pittsburgh office on CMU's campus in 2006 to gain proximity to SCS's faculty and students.

Eric Schmidt, executive chairman of Google Inc., a former member of the CMU Board of Trustees and the keynote speaker at President Suresh's inauguration, noted, "Andrew Moore has been a respected contributor to Google and the Pittsburgh community since he helped start the office there in 2006.

"Some of Google's strongest talent has come out of CMU, and we look forward to continuing our relationship

with the university. I know Andrew will help inspire the next generation of innovators."

Moore remarked, "I have had a wonderful eight years at Google Pittsburgh: a place which I believe has the most creative and driven gang of computer scientists in the world. We plan to remain great friends within the broader context of growing Pittsburgh's leadership in science and technology."

Moore's research ranges from improving manufacturing methods and finding distant asteroids in space to early detection of bioterrorism using data on over-the-counter medication purchases. His CMU-based research group, the Auton Lab, collaborates closely with other scientists, government agencies and technology companies. Auton Lab algorithms are now in use in dozens of commercial, university and government applications.

He received a doctorate from the University of Cambridge in 1991 and joined the CMU faculty in 1993 following two years of post-doctoral research. In 2005, he was elected a fellow of the American Association for Artificial Intelligence.

Moore succeeds Randal Bryant, who will return to the CMU faculty after serving as dean since 2004.

## CMU Partners with the Tony Awards; Six Alumni Snag Nominations

CONTINUED FROM PAGE ONE

In addition, shows nominated for Best Musical include CMU alumni. Catherine Walker (A'01) is an ensemble cast member of "A Gentleman's Guide To Love and Murder," and Daisy Hobbs (A'10) is an ensemble cast member of "Aladdin."

"The Glass Menagerie" received seven nominations. CMU cast members along with Jones were Zachary Quinto (A'99) and Nicholas Rehberger (A'13).



**ONLINE: WATCH THE NOMINATIONS AT [WWW.CMU.EDU/TONY-AWARDS](http://WWW.CMU.EDU/TONY-AWARDS).**

"Act One" received five nominations. CMU cast members include Bob Ari (A'71, '95) and Will Brill (A'09).

"With the centennial celebration of the School of Drama, this year's Tony Award nominations are particularly gratifying. It's wonderful to see how alumni have helped shape this year's season on Broadway," said Peter Cooke, head of the School of Drama.

As the oldest drama degree-granting program in the United States, CMU has produced hundreds of Tony nominees

and 31 Tony winners — eight in 2013 alone.

The 2014 Tony Awards, hosted by Hugh Jackman, will be broadcast live from Radio City Music Hall in New York City on Sunday, June 8, on CBS.

The broadcast will feature an on-air tribute to CMU's century of producing top theatre talent, from actors and musicians, producers to technicians, backstage to front office and everywhere in between.

### Tony Awards, CMU Will Recognize Theatre Educators in 2015

Nominations for the "Tony Honor for Excellence in Theatre Education" will be open to the public and accepted starting in September 2014 at [tonyawards.com](http://tonyawards.com) and [cmu.edu](http://cmu.edu). A panel of judges comprised of leaders from the American Theatre Wing, The Broadway League, CMU and others from the theatre industry will select the finalists and winner based on criteria set forth by the committee. Demonstrating a positive impact on the lives of students, advancing the theatre profession and



JONATHAN GROFF, HUGH JACKMAN AND LUCY LIU CO-HOSTED THE TONY NOMINATIONS BROADCAST.

a commitment to excellence will be among the qualifications.

"Throughout its history, Carnegie Mellon has been home to many talented and inspirational faculty, so we understand the important role teachers play in transforming lives," said CMU President Subra Suresh. "Behind every Tony winner is a teacher who inspired and nurtured a young talent to grow, to pursue

big dreams and accomplish great things. We are excited to bring those heroes into the Tony spotlight."

The winning teacher will receive the award on stage at the 2015 Tony Awards. The trip to New York City will be included, plus a financial contribution will be made to the theatre arts program at the winner's school.