Award-Winning Educators
Make Personal Connections

Piper Staff

Faculty who exemplify the university’s standards of excellence in education are recognized annually as part of the Celebration of Education, which this year will take place starting with a reception at 4:30 p.m., Wednesday, April 25 in Rangos 1 and 2 at the University Center. The events are free and open to the public.

The Celebration of Education consists of five main awards: The Ryan Award, The Barbara Lazarus Award and The Gelfand Award, presented annually, and The Doherty Award and The Academic Advising Award, given every other year. In addition, the most recent recipients of the College Teaching Awards, the Graduate Student Teaching Award and the Graduate Student Service Award also are honored. Continued on page six

CIC To Be Named For Former CMU President

Teresa Thomas

Six former Carnegie Mellon presidents have been immortalized with university buildings named in their honor. Soon there will be a seventh.

Students, faculty and staff are invited to a ceremony at 11 a.m., Wednesday, April 18 in the Collaborative Innovation Center (CIC) lobby, where the CIC will be named the Robert Mehrabian Collaborative Innovation Center in honor of CMU’s seventh president. Mehrabian, who led CMU from 1990 to 1997, is now chairman, president and CEO of Teledyne Technologies Inc.

The dedication recognizes Mehrabian’s contributions to economic development in Pittsburgh

Autism Study Crosses Disciplines, Universities

Shilo Rea

While it’s well accepted that genetics play a strong role in autism disorders, the underlying causes remain a mystery.

But, now for the first time, researchers, including Carnegie Mellon’s Kathryn Roeder and the University of Pittsburgh’s Bernice Devlin, have identified three genes that affect a child’s risk for autism.

Published in “Nature,” this series of studies suggests that autism disorders are caused by variations in multiple unrelated

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Ryan Wolfe, director of Campus Services, recently attended a Staff Council general body meeting to discuss Carnegie Mellon’s rising use of public transportation and the impact of the proposed massive Port Authority Transit service cuts, expected to take place Sept. 2. The Piper caught up with Wolfe after the talk.

**How will the proposed changes at the Port Authority Transit (PAT) affect members of the Carnegie Mellon community?**

The proposed changes as they stand right now include an approximate 35 percent reduction in their system. They are proposing an elimination of 46 routes, all of which are currently used by staff and students.

In addition to the proposed 35 percent reduction, there’s a general fare increase that will take place in July. While this does not directly impact our community members that use Port Authority services, it will have a negative impact on the Pittsburgh region. Obviously, the route eliminations are of the greatest concern to Carnegie Mellon. Ninety percent of our ridership is concentrated in about 20 routes. If you look at the 61s, 71s and a few others, that’s a real big bulk of our ridership. Four of these top 20 routes, all heading east, are on the list for possible elimination.

The other concern is the 10 p.m. service stop time. Only five of our top 20 bus routes will continue to run after 10 p.m. under the proposed changes to PAT’s schedule — 58, 61B, 69, 71A and 71D. Our shuttle and escort system ridership has been steadily increasing and is up 30 or 40 percent. The PAT reductions would put even further stress on that if there were essentially only five buses serving students after 10 p.m.

**What is ridership like for Carnegie Mellon?**

It has gone up over the years. Last year we were at almost 1.8 million rides, and I would expect our ridership to be at or above that this year.

Between 2006 and 2011, we’ve had 30 percent growth.

**Where is the impact going to be the worst?**

Specifically, with 26 of the proposed 46 routes to be eliminated, the east would be especially hard hit. If you look at the proposed route and park-n-ride eliminations, it’s going to cause a great deal of traffic to funnel into Wilkinsburg. It really would be a very challenging situation.

We are very concerned about that. From a parking resource standpoint, we can’t easily accommodate anymore parking than we have right now. We’re looking at the idea of satellite lots, but that’s in the very early stages.

**Top 20**

All of the top 20 Port Authority Transit routes used by members of the CMU community are being considered for service reductions or elimination. They include:

- 61D 54  P1
- 61C 71C  Light Rail
- 61A 64*  P3
- 61B 28X  S2
- 71B 75  58*
- 71D 67  86
- 71A 69*  

*indicates proposed elimination

With a new agreement, will the university continue to pay for faculty and staff to ride for free?

Yes. To clarify, the students do pay a transportation fee, and the university through the benefits process funds faculty and staff participation. While there is not an additional charge to the employee, there is money being collected centrally for both groups.

Is there anything people can do to be involved?

Based upon the turnout and conversation we had at the town hall meeting as well as other presentations around campus, it is clear that our community is aware and concerned. We will continue to communicate with both the Port Authority and the campus concerning the proposed cuts.

Whether or not you use PAT, a service reduction of this size will impact you. Please contact your local representative in Harrisburg, in the Senate or the House, and let them know your concerns via email or phone. All those messages start to add up.

The students are working with Government Relations and the Dean of Students to plan a trip to Harrisburg in early April to do a little lobbying on behalf of the university.

The comment period is already over, and we tried to do our best to get that message out there. I know we received more than 100 messages, and we will summarize those and share them with the university’s Government Relations Office so they can use them in ways that will be beneficial to the cause.
The late Roger Sorrells had an affinity for university libraries. On April 17, he’ll have one named for him at Carnegie Mellon.

At a dedication ceremony from 4 to 5:30 p.m. that day, Carnegie Mellon will name its Engineering & Science Library in Wean Hall the Roger Sorrells Engineering & Science Library thanks to a generous gift from his longtime partner, Dean of University Libraries Gloriana St. Clair.

Sorrells passed away last September.

“One of Roger’s hobbies was visiting different universities all over the world — in China, India, New Zealand and the United States — to see their buildings and libraries. If he were walking around Carnegie Mellon now, he would walk into a library named after himself and see this wonderful recognition of his life in academia,” St. Clair said.

The late Roger Sorrells and Gloriana St. Clair visited libraries around the world

The library pays tribute to the man St. Clair met in 1984 at Texas A&M University, where they developed a close bond, travelling together to work on many digital library projects.

A physicist and mathematician by training, Sorrells taught at San Antonio College and Southwest Texas State University (now Texas State University) in San Marcos. He later pursued a Ph.D. in Computer Science at Texas A&M.

In 1978, Sorrells joined the Texas A&M Computing Center, where he eventually became head of the Help Desk, recruiting and training students to answer questions and solve problems. He was greatly admired by students, whom he assisted in troubleshooting their computer programs.

For his exemplary service to the university, Sorrells received Texas A&M’s President’s Meritorious Service Award in 1991.

After retiring from A&M in 1992, he volunteered for the World Shakespeare Bibliography and railroaded frequently to Pennsylvania. When St. Clair joined Carnegie Mellon in 1998, he became involved in university activities, including the Million Book Project. St. Clair and Sorrells were founding members of CMU’s Highlands Circle, a society honoring those who have given $1 million or more to the university.

Besides the World Shakespeare Bibliography, he worked with Mothers Against Drunk Drivers, Compassionate Friends and the Lions Club. He loved to bike, hike, spelunk and snorkel.

In an email announcing St. Clair’s gift and the library dedication, Provost and Executive Vice President Mark Kamlet called Sorrells “a quiet, renaissance man who became a steadfast supporter of Carnegie Mellon.”

Carnegie Mellon continued from page one

Innovation Center was a particularly appropriate choice to honor Mehrabian’s legacy to the university and to the region.

“During his presidency, Robert Mehrabian was an ardent and effective advocate for the role of Carnegie Mellon in generating prosperity for the city and the nation. It is fitting that his legacy be associated with a building that so visibly links the university, its students and faculty to leading technology companies and the broader Pittsburgh community.

“As an entrepreneur, a scientist and leader on this campus, he defined new relationships for Carnegie Mellon with many business and community partners and helped our Pittsburgh campus to grow gracefully and beneficially for its residents. It is an honor to attach the name of Robert Mehrabian to the Collaborative Innovation Center,” Cohon said.

Legacy Includes Economic Development, Tech Transfer

Mehrabian played a vital role in the Regional Economic Revitalization Initiative, which in the 1990s developed a plan for economic development in the greater Pittsburgh area. Mehrabian also is credited with stimulating the university’s technology transfer operation and his efforts helped lead to the development of a Carnegie Mellon facility in the Pittsburgh Technology Center, a former mill site that is now a vital stretch of research and development facilities along the Monongahela River.

Efforts like these eventually enabled university and government leaders to successfully obtain funding for the creation of the Collaborative Innovation Center, a unique business incubator that contributed to Pittsburgh being named a top technology city by Forbes.com.

The facility, which received a Gold LEED rating from the U.S. Green Building Council for its sustainability and energy efficiency, was built in 2005 to provide office and lab space for technology companies wishing to partner with Carnegie Mellon to create innovative new concepts and products for the marketplace. Many call the building, developed in partnership with the Regional Industrial Development Corporation, a “hub” of technological innovation in Pittsburgh. It is the only building in the world to have housed Google, Intel, Apple and Disney.

Mehrabian helped to lay the groundwork for CMU’s successful technology commercialization efforts. Over the years that followed, faculty and students created more than 300 companies and 9,000 jobs in the region. Building on the Mehrabian legacy, CMU announced earlier this year a Greenlighting Startups initiative, a portfolio of CMU incubator groups designed to speed innovation from the research lab to the marketplace.

Improving Undergraduate Education and Quality of Life on Campus

During his presidency, Carnegie Mellon continued to climb among the nation’s elite universities, making great strides in improving undergraduate education and the quality of life on campus for students, faculty and staff. Enhancements in academic programs and student activities helped student applications soar to more than 13,000 in 1996, more than doubling the amount in Mehrabian’s inaugural year in office.

Mentoring and advising initiatives and efforts to enhance undergraduate teaching helped to attract high-quality students and greatly improved the student retention rate.

Mehrabian oversaw the completion of the East Campus Project, an ambitious building plan that resulted in a new University Center, two residence halls, Gesling Stadium and a multi-level indoor parking garage. The Intelligent Workplace, the Purnell Center for the Arts, and Posner Hall, also were completed as part of the East Campus Project.

A research facility at the Pittsburgh Technology Center and the George A. Roberts Engineering Hall also were completed during his tenure.

THREE
The iconic American diner is an ideal setting for dramatic possibilities, which is why it’s been used for movies like “Diner” and “American Graffiti” and featured in paintings such as Edward Hopper’s “Nighthawks.” And on April 26, the School of Drama will uncover the joys and sorrows of 1950s diner culture when it stages William Inge’s classic American play “Bus Stop,” set in the diner of a small Kansas town.

“There’s a kind of nostalgia for diners,” said Gregory Lehane, director of “Bus Stop” and professor of drama and music. “All that chrome and Formica and the spirit of the ‘50s with all that stillness.”

The diner’s primary purpose is to be a bus stop on a two-lane desolate highway in an era that existed before interstates and travel marts populated the country.

The show debuted on Broadway in 1955 to critical success and ran for more than a year. It also was made into a movie starring Marilyn Monroe.

“Bus Stop” is one of those iconic ‘bar room’ plays — a bunch of strangers who would otherwise not be together socially are brought together because a snow storm makes the bus stuck overnight,” Lehane said.

Inge’s characters transcend stereotype. Cherie is more than just a struggling nightclub singer hoping for stardom and Bo is more than just an American cowboy who thinks he owns everyone and everything, and claims Cherie as his own.

“There’s a bit of William Inge in all these characters,” said dramaturg Michael Christie (BFA’12). Christie assisted Lehane with research prior to the play’s production as part of his senior thesis in the Dramaturgy Program.

Born and raised in Kansas, Inge struggled with alcoholism and depression and most of his characters in his plays (“Picnic” and “Come Back, Little Sheba”) were inspired by real-life events.

Lehane has directed plays in New York City and has directed for all the major television networks as well as PBS, TBS, Lifetime, Nickelodeon and The Disney Channel. He said he was attracted to “Bus Stop” because of his interest in bridging the gap between the culture of an earlier time and place, before tablet computers and smartphones connected us to the world.

“The culture of the ‘50s seems almost childlike compared to the culture of the 21st century,” Lehane said. “There’s no computers, televisions are new, and rural and small town life is very much still alive. Even our views on ambition and money are completely different.”

In working with Lehane’s idea of finding a bridge into our American, scenic designer Josh Smith (MFA’12) chose not to capture any real-life “kitchen sink” ideas of a 1950s bus stop. Instead, the audience will encounter on the stage an abandoned field where the skeleton of a bus sits, looking as if its been sitting there for 60 years.

“The characters will materialize from the past, relive the night quite vividly and go back into memory,” Lehane said.

Inge is one of this country’s most renowned playwrights but often is overshadowed by Arthur Miller or Tennessee Williams, according to Lehane, who said he hopes there might be resurgence in Inge’s plays as he finds them so accessible.

“He has a kind of intimate voice,” Lehane said. “That makes one feel quite comfortable with him and knowledgeable about the characters — we hear our own voice in their articulation of joys and sorrows.”

“Bus Stop” fits the classic mold of romantic comedy, but like most of Inge’s plays the humor is tinged with an autumnal feeling. Even though the romantic couple seem to be heading toward some happy ending, you get “a slightly minor key feeling,” Lehane said, “that life goes on and not always full of laughs.”

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**New Book Profiles Filmmaker and the Politics of American Cinema**

Shilo Rea

John Sayles is a model of the contemporary independent filmmaker. Sayles functions more independently than most directors because he raises the funds for his films himself.

In the new book “John Sayles,” Carnegie Mellon’s David R. Shumway profiles Sayles and how he has used his freedom to write and produce films with a distinctive personal style and clearly expressed political opinions.

“Like Classic Era directors such as Howard Hawks and Alfred Hitchcock, John Sayles is a great storyteller,” said Shumway, professor of English and director of the Humanities Center. “But unlike their films, his also ask us to think critically about the world in which we live. He has been able to make such films because he has not had to depend on entertainment conglomerates to finance them, and thus has retained artistic control of his work. His films teach us about historical events we are unlikely to know much about — such as Baseball’s Black Sox scandal, the Stone Mountain Coal War, or the Philippine-American War — but they also, like a good teacher, raise questions about assumptions viewers are likely to hold before seeing them.”

From “The Return of the Secaucus Seven” to “Sunshine State,” Sayles’ films have conveyed progressive political positions on issues including race, gender, sexuality, class and disability. Shumway feels the defining characteristic of Sayles’ cinema is realism, exploring his attention to narrative in films such as “Eight Men Out,” “Passion Fish” and “Lone Star.”

Shumway also provides details about the conditions surrounding the films’ production, distribution and exhibition.

For more information about “John Sayles,” which was published by the University of Illinois Press as a volume in the Contemporary Film Directors series, visit www.amazon.com/John-Sayles-Contemporary-Film-Directors/dp/025207856X.

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**Alumnus, University President Pledges CIT Fellowship**

**Chris Swaney**

Carnegie Mellon alumnus Nam Pyo Suh and his wife, Young Suh, have pledged funds for a new endowed graduate fellowship in mechanical engineering.

“We are extremely honored to have such a prominent alum give back to CMU in a way that will benefit future technology leaders,” said Nadine Aubry, the Raymond J. Lane Distinguished Professor and head of Carnegie Mellon’s Mechanical Engineering Department.

A longtime Carnegie Mellon supporter, Suh received a Ph.D. in mechanical engineering from CMU in 1964 and an honorary doctorate in science and technology in 2008. The latter recognized decades of innovative work, including his development of a novel process for production of plastic parts used in factories worldwide. Suh also has paved the way for joint graduate programs and synergies between CMU and KAIST (Korea Advanced Institute of Science and Technology), where he serves as president.

Innovative and dynamic, Suh accepted a presidential appointment in 1964 to the National Science Foundation (NSF), where he was in charge of engineering. During his NSF tenure, Suh created a new direction for the Engineering Directorate and introduced a new organizational program structure for supporting research to strengthen engineering education and research throughout the U.S. Prior to going to KAIST, Suh was a professor at MIT, where he is currently the Ralph E. and Eloise F. Cross Professor, Emeritus.

“Young and I are honored to give back to Carnegie Mellon, where I received such rigorous graduate education, and we hope that this pledge will inspire other Carnegie Mellon alumni in Korea to give back to their alma mater and participate in CMU’s capital campaign,” Suh said.

Carnegie Mellon has 900 alumni living in Korea and more than 300 Korean graduate and undergraduate students currently enrolled at the university. In November, CMU President Jared L. Cohon and Tepper School of Business Dean Robert M. Dannon addressed more than 200 CMU alumni and parents at a Seoul event. At that event, Jong Woo Kwak, CMU alumni chapter president and Tepper School graduate, spoke eloquently about the need for CMU alumni in Korea to give back to CMU alumni chapter president and Tepper School graduate, spoke eloquently about the need for CMU alumni in Korea to participate in the capital campaign.

Donors from outside the United States have contributed $64.2 million of the $1.02 billion that CMU has raised to date about the need for CMU alumni in Korea to give back to CMU, according to Lehane, who said he hopes there might be resurgence in Inge’s plays as he finds them so accessible.

“He has a kind of intimate voice,” Lehane said. “That makes one feel quite comfortable with him and knowledgeable about the characters — we hear our own voice in their articulation of joys and sorrows.”

“Bus Stop” fits the classic mold of romantic comedy, but like most of Inge’s plays the humor is tinged with an autumnal feeling. Even though the romantic couple seem to be heading toward some happy ending, you get “a slightly minor key feeling,” Lehane said, “that life goes on and not always full of laughs.”

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**Four**
Breaking Stereotypes

Professor’s Book Focuses on Arab Women in Arab Media

Heidi Opdyke

Being a Qatari professor at an American university in Doha, Amal Al Malki is used to breaking stereotypes.

“They tend to see me as the representative of the culture, especially the female culture in Qatar, which could be misleading,” said Al Malki, an assistant teaching professor of liberal and social sciences at Carnegie Mellon Qatar.

“There is a constant fight against people’s stereotypes of the others, and I hope that each time I prove myself worthy of my position, I break a stereotype.”

With that in mind, Al Malki was the lead author on a new book, “Arab Women and Arab News: Old Stereotypes and New Media,” jointly published by Bloomsbury Academic Press in London and Bloomsbury Qatar Foundation Publishing in Doha. Al Malki said the book is a personal and academic attempt to offer a new interpretation of who Arab and Muslim women are without being defensive or emotional.

“As an academic, I feel that it is my duty as someone who belongs to different cultures to work on bridging the gaps between our part of the world and the West,” she said. “There is a long history of cross-cultural and linguistic adaptation, the Islamic civilization has helped Europe in setting the grounds in different fields, and now we have adopted the English language as a medium of education and communication.

“As a woman who lives amid these misunderstandings, I’m constantly misrepresented in the Western media and under-represented in the Arab media, so I felt something had to be done.”

Al Malki and David Kaufer, a professor of English, were granted a priority fund in 2008 by the Qatar National Research Fund to investigate Arab women representation in Arab media. Saguru Ishizaki, an associate professor of English who also has a courtesy appointment in the School of Design, created a system for the quantitative base for the study, and Kira Dreher, a visiting instructor at Carnegie Mellon Qatar, assisted with the research. Dreher received her master’s degree in literary and cultural studies from CMU in 2007.

The study looked at more than 2,300 articles and 100 Arab media sources from a 22-month time period. Kaufer said 44 percent of the mentions for women came from four liberal and transnational Arab presses based in London.

Al Malki said that Arab women voices have been an integral part of the construction of the news, whether in traditional media or through new methods such as social media.

“Comparing to social science studies of the portrayal of Arab women in Western news conducted during the 1980s and 1990s, Arab women have come a long way as a unified force and a powerful voice in hard news in the Arab press,” Al Malki said. “Arab women are indeed represented with a greater balance of positive and negative images than have been found in older Western studies of Arab women in Western media, especially in the liberal pan-Arab newspapers.”

While focusing on the Arab media for the study, Al Malki and the other authors said the research is important to share with Western audiences.

“I would be more than happy if after reading the book a stereotype is broken about Arab and Muslim women,” Al Malki said. “We believe our book will be of interest to women around the world invested in enforcing human rights for women. We have written this book for the women of Qatar but also for this wider population of women who are seeking ways of taking the next steps in an active, productive life.”

Kaufer said that Arab women have made the same kinds of gains and experience the same kinds of challenges that women in every region of the world face, including the United States.

“Women in both America and Arab regions want education and advancement, rewarding careers, and happy and healthy families,” he said. “It sounds trivial when you put it this way, yet it’s surprising how many Western belief systems think Arab women (and families) are fundamentally different than American women and families in these respects.”

“As Seen on TV”

New Mini Course Helps Carnival Booths Rerun Favorite Show Moments

Abby Simmons

Midway visitors may see some unexpected architectural features on booths at this year’s Spring Carnival and Reunion Weekend, April 19-21.

To help bring this year’s “As Seen on TV” theme to life, a new one-unit mini course, Realization and Construction of Themed Environments, was offered by School of Drama faculty members Kevin Hines and David Boevers.

Hines and Boevers are technical directors and have served as booth judges in the past. Hines said that the process of building a booth is similar to what is done in theater.

“We’re probably going to do it again next year, and we hope to see more people take advantage of it,” Hines said.

The class offered new techniques and methods for designing and building booths with a focus on safety. Hines said they also discussed material options and suppliers, which may have been unknown to students previously.

“It opened up the line of communication for students with professors,” said Spring Carnival Committee Chair Meg Hayes (DC’11).

“Some organizations are now introducing more sophisticated booth design features like curved walls and cantilevers.”

“Shark Week,” “Looney Tunes” and “Mythbusters” are just a few of the pop culture references that will go into some of the designs, she said.

Hayes, a graduate student in the Heinz College, said Madelyn Miller, director of Environmental Health and Safety, and Larry Cartwright, a College of Engineering faculty member, also are lending equipment and expertise to make sure student builders and Midway visitors are safe.

Sweepstakes Buggy Races

Two new teams will compete in this year’s Sweepstakes buggy races. A group of students who first met while living in the Residence on Fifth have formed team APEX, and Delta Delta Delta Sorority and Delta Tau Delta Fraternity have partnered to form team Delta Force.

For a full preview of this year’s competitive slate, fans can read Buggy Alumni Association Head Mechanic Sam Swift’s weekly “Rolls Reports” at http://cmubugg.org. WRCF 88.3-FM will provide live race-day interviews and play-by-play commentary, and cmutv.org/buggy.

Carnival Finale

The Activities Board has moved its headlining concert, previously held on Friday of Spring Carnival weekend, to 7:30 p.m. Saturday. The concert will end with fireworks.

“We made this change so that the show is similar to the Guster concert we helped organize last fall,” said Activities Board Executive Chair Adam Kriegel, referring to the grand finale of Carnegie Mellon’s celebration of William S. Dietrich II’s historic $265 million gift to the university.

The concert’s main act, Passion Pit, is an electropop band from Cambridge, Mass. Pittsburgh-based indie rock band Donora will open the concert, which is free and open to the public. The concert will take place on the CFA Lawn and does not require a ticket or wristband.

In the event of inclement weather, the concert will move to Wiegand Gym, and wristbands will be distributed on a first-come, first-served basis at the University Center Information Desk.

Students involved in planning these time-honored campus traditions said they appreciate the guidance they have received from Student Activities staff.

“I’ve visited our adviser, Taylor Grabowsky, nearly every day since Spring Break,” Hayes said.

Sweepstakes adviser Kaycee Palko said fellow staff members from the Division of Student Affairs and volunteers from other divisions are essential to the success of the weekend.

“Many people have told me they look forward to Spring Carnival, because it’s an opportunity for them to interact directly with our students,” Palko said.

Alumni Relations also has been busy planning reunions with the assistance continued on page seven
Robert E. Doherty Award for Sustained Contributions to Excellence in Education

Mark Stehlik, assistant dean of undergraduate education in the School of Computer Science, is the recipient of this year’s Robert E. Doherty Award for Sustained Contributions to Excellence in Education.

Stehlik has been “the heart and soul” of SCS’s undergraduate program since its inception in 1988, said Randal E. Bryant, SCS dean. “He has taught introductory programming, advised over 2,500 students, served as the leader of our introductory programming education group, and been an inspiration to all of us.”

The honor comes at a pivotal time for Stehlik, who this summer will begin a five-year stint as associate dean of education at Carnegie Mellon Qatar. He taught computer science at the Doha campus during stints in 2006, 2007, 2008 and 2011, and organized its annual high school programming contest.

Stehlik, who joined the faculty in 1982, has been a national leader in computer science education. He has been involved in the Advanced Placement Computer Science course from its inception in 1984, organized numerous training workshops for high school teachers and co-authored “Running on Empty,” a 2010 study of the nation’s neglect of computer science education.

As assistant dean, he is known for setting high educational standards, but also for making a personal connection with each student.

Henry DeYoung, who earned his bachelor’s degree in 2008, noted Stehlik’s office is famously crammed full of books. Yet, “Mark always has room for everyone,” DeYoung said. “Even though only the front half of my wheelchair could barely squeeze between the stacks of books, Mark always had room for me, too.”

DeYoung, now a Ph.D. student, said Stehlik’s knowledge of computer science and his insight into students make him an invaluable mentor. “Mark had the uncanny ability to guide my course selections toward the area of computer science in which I would eventually become interested,” he recalled, “even before I could recognize that interest myself.”

William H. and Frances S. Ryan Award for Meritorious Teaching

When Professor Yueming Yu joined the Carnegie Mellon faculty in 1992, she taught the Chinese language class offered by the Department of Modern Languages. Now, thanks to Yu’s dedication to developing the program, the Chinese Studies Program has grown from an initial five students to more than 500, with both a major and minor available.

For her role in establishing Chinese Studies at CMU and for her excellence in the classroom, Yu has won the 2012 William H. and Frances S. Ryan Award for Meritorious Teaching.

“Yueming Yu has established the foundation of our successful Chinese program and has played a key role in cultivating its extraordinary strength,” said Susan G. Polansky, head of the Modern Languages Department. “Yueming’s passion and dedication have been major factors in its explosive growth. She has found effective ways to teach complex material while guiding her students to accomplish their best results.”

Yu has taught all levels of Chinese classes over the past 16 years — from elementary to advanced and two special fourth-year offerings: Topics of Contemporary Culture of China and Studies in Chinese Traditions. In addition to teaching, Yu coordinates the Chinese program, designing the curriculum and developing syllabi and teaching materials. She also has been the adviser to Chinese minors since 1998 and majors since 2005.

Her students — current and former — uniformly praise Yu for her teaching manner and effectiveness, as well as for her roles as a mentor and adviser. In 2010, she won the Dietrich College of Humanities and Social Sciences Elliot Dunlap Smith Award for Distinguished Teaching and Educational Service.

Barbara Lazarus Award for Graduate Student and Junior Faculty Mentoring

Lofty goals: pursued and achieved.

That has been a decade-long mantra for Dena Haritos Tsamitis, the scrappy, sharp-eyed innovator who turned a fledgling Information Networking Institute (INI) into an educational leader and academic home to happy, thriving Carnegie Mellon students and alumni worldwide.

Perhaps that’s why this Pied Piper of student dreams and success stories was chosen as the 2012 recipient of the Barbara Lazarus Award for Graduate Student and Junior Faculty Mentoring.

Not only does she build relationships and cultivate a sense of community, INI alums say she is a leader when it comes to the art of decision-making.

“Although I graduated almost three years ago, I still go back to my emails from Dena to give myself rejuvenated confidence and enthusiasm to make the most of my life,” said Aditi Petharkar, (FIN’09), a senior business consultant for London-based Grant Thornton.

And the formula of success continues to grow. Students, alumni and junior faculty praise Tsamitis for leading interdisciplinary technology programs in a department that continues to distinguish itself by the quality of its students and faculty and its caring mentorship of minority and women students.

It is not uncommon for her to pen notes or inquire about the health of a

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The College Teaching Awards

Below are the College Teaching Award recipients recognized in 2012.

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<th>Carnegie Institute of Technology</th>
<th>The H. John Heinz III College</th>
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<tr>
<td>Benjamin Richard Teare, Jr. Teaching Award</td>
<td>Martica Wade Teaching Award</td>
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<td>James F. Hoburg, Professor, Department of Electrical &amp; Computer Engineering</td>
<td>Wilpen L. Gorr, Professor</td>
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<td>College of Fine Arts</td>
<td>Mellon College of Science</td>
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<td>Henry Hombostel Teaching Award</td>
<td>Julius Ashkin Teaching Award</td>
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<td>Ingrid Sonnichsen, Associate Teaching Professor, School of Drama</td>
<td>Danith H. Ly, Associate Professor, Department of Chemistry</td>
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<tr>
<td>The Dietrich College of Humanities &amp; Social Sciences</td>
<td>Richard Moore Award for Sustained and Substantial Contributions to Education</td>
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<td>Elliott Dunlap Smith Award for Teaching and Educational Service</td>
<td>Jonathan Minden, Professor, Department of Biological Sciences</td>
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<tr>
<td>Bonnie L. Youngs, Teaching Professor of French, Department of Modern Languages</td>
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School of Computer Science

- Herbert A. Simon Award for Teaching Excellence in Computer Science
- David Kosbie, Assistant Teaching Professor, Department of Computer Science

Tepper School of Business

- Gerald L. Thompson Teaching Award in the B.S. Business Administration Program
- David Tungate, Associate Teaching Professor of Law

M.B.A. George Leland Bach Excellence in Teaching Award

- Willem-Jan van Hoeve, Assistant Professor of Operations Research

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Khosla said. "She emulates what it means to be a mentor, and she instills leadership qualities in students and alumni through her positive influence."

Pradeep K. Khosla, dean of the College of Engineering and the Dowd University Professor, praised Tsamitis for Educational Outreach. "She continues to make a difference."

"She was the first person to call after my mother’s kidney surgery," said Tyelisa C. Shields (INI’10). "She is what it means to be a fantastic teacher, but he actually cares about the world. He walks the walk. He is willing to give his time and energy to students who elicit his expertise," she said.

Brandon Loughey (HNZ’09) worked as a student consultant for the Ministry of Health in Palau and as a nonprofit partner when he was the Pittsburgh Food Bank’s IT Outreach Coordinator. "Joe’s program and mentorship has had an enduring and positive impact not only on my academic life, but in my professional and personal life as well," Loughey said.

Steven Andrianoff, an associate professor at St. Bonaventure University, said Mertz was an inspiration for starting his own consulting class. "I have no doubt that Joe’s efforts have had a positive impact on hundreds of Carnegie Mellon students," Andrianoff said. "I attest to the positive impact his work has had on me, on St. Bonaventure University students, on community leaders in the greater Olean area and on St. Bonaventure University as a whole."

Not every teacher sends students to the Cook Islands, Sri Lanka or the Pittsburgh Food Bank for assignments. But that’s what makes Joseph Mertz, an associate teaching professor in the Dietrich College, stand out to students who elicit his expertise, Loughery said. “I attest to the positive impact his work has had on me, on St. Bonaventure University students, on community leaders in the greater Olean area and on St. Bonaventure University as a whole.”

"This willingness, on Professor Mertz’s part, to go above and beyond just being a professor to his students, is what sets him apart. Not only is he a fantastic teacher, but he actually cares about the world. He walks the walk. He is willing to give his time and energy to students who elicit his expertise,” she said.

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"She continues to make a difference."
China’s “Soft” Censorship

Carnegie Mellon Study Looks at Deleted Messages on Chinese Microblogs

By Byron Spice

Researchers in the School of Computer Science analyzed millions of Chinese microblogs, or “weibos,” to uncover a set of politically sensitive terms that draw the attention of Chinese censors. Individual messages containing the terms were often deleted at rates that could vary based on current events or geography.

The study is the first large-scale analysis of political censorship in social media, a topic that drew attention and controversy earlier this year when Twitter announced a country-by-country policy for removing tweets that don’t comply with local laws.

In China, where online censorship is highly developed, the researchers found that oft-censored terms included well-known hot buttons, such as Falun Gong, a spiritual movement banned by the Chinese government, and human rights activists Ai Weiwei and Liu Xiaobo. Others varied based on events; Lianghui, a term that normally refers to a joint meeting of China’s parliament and its political advisory body, became subject to censorship when it emerged as a code word for “planned protest” during pro-democracy unrest that began in February 2011.

The CMU study also showed high rates of weibo censorship in certain provinces. The phenomenon was particularly notable in Tibet, a hotbed of political unrest, where up to 53 percent of locally generated microblogs were deleted.

The study by Noah Smith, associate professor in the Language Technologies Institute (LTI); David Bamman, a Ph.D. student in LTI; and Brendan O’Connor, a Ph.D. student in the Machine Learning Department, appeared in the March issue of First Monday, a peer-reviewed, online journal.

“A lot of studies have focused on censorship that blocks access to Internet sites, but the practice of deleting individual messages is not yet well understood,” Smith said. “The rise of domestic Chinese microblogging sites has provided a unique opportunity to systematically study content censorship in detail.”

The so-called Great Firewall of China, which prevents Chinese residents from accessing foreign websites such as Google and Facebook, is China’s best known censorship tool. Other countries also are known to block Web access, such as when Egypt shut down Twitter and other social media sites during last year’s Arab Spring protests.

But blocking access to all sites and services is impossible if China or any other country is to harness the Web’s commercial and educational potential.

Bamman said. An alternative is to allow access to sites, but police the content, eliminating messages deemed objectionable. Automated methods may be used to eliminate some messages, while others are deleted manually, he noted.

Seldom are all weibos with a sensitive term deleted, but anecdotal evidence is overwhelming that certain messages are targeted.

“You even see some weibos where the writer asks, ‘Is this going to be deleted?’” O’Connor said. In late 2010, New York Times columnist Nicholas Kristof opened an account on a Chinese microblog site; within an hour of sending a message about Falun Gong, his account was shut down.

To study this “soft” censorship, the CMU team analyzed almost 57 million messages posted on Sina Weibo, a domestic Chinese microblog site similar to Twitter that has more than 200 million users. They collected samples of weibos from June 27 to Sept. 30, 2011, using an application programming interface (API) that Sina Weibo provides to developers so they can build related services.

Using the same API, they later checked a random subset of weibos to see if they still existed and another subset that included terms known to be politically sensitive. If a weibo was deleted, Sina would return what the researchers came to regard as an ominous message: “target weibo does not exist.”

In late June and early July, for instance, rumors began circulating of the death of Jiang Zemin, a former general secretary of the Communist Party of China who came to power during the Tiananmen Square protests of 1989. On July 6, at the height of the rumor, 64 of 83 messages containing his name were deleted; on July 7, 29 of 31 such messages were deleted.

As another check, the researchers compared the frequency of such messages on Sina Weibo with those on the Chinese language version of Twitter, which officially is blocked by China but can still be accessed by net-savvy people. On July 6, Jiang’s name appeared in one out of every 75 tweets, but just one out of every 5,666 messages on Sina Weibo — another indication that the Jiang conversations on Sina Weibo are suppressed.

Many weibos with high deletion rates included terms and names known to be politically sensitive, such as Fang Binxing, the architect of the Great Firewall of China, and references to state propaganda. Others reflect sensitivity to events; a term meaning “to ask someone to resign” became subject to deletion following the high-speed rail crash that killed 40 people in Wenzhou last July and apparently referenced the minister of railways.

Censored terms are not always political. Following the March 2011 Fukushima nuclear disaster in Japan, weibos containing such politically innocuous terms as iodized salt and radioactive iodine had high deletion rates. The researchers believe these deletions were the result of government efforts to quash false rumors about the nuclear accident causing salt contamination.

Not all deletions are necessarily state-instigated censorship, the researchers noted. Spam and pornographic messages also are subject to deletion, just as they are in the United States.

By establishing a methodology for studying soft censorship in China, the researchers say they now have a means for actively monitoring social media censorship as it changes over time. They also may have the means to probe deeper, identifying code words and metaphors used to sidestep censors.

SafeSlinger

New CyLab App Provides Security

By Chriss Swaney

We all want to be protected from cyber-criminals and unsafe communications while on our smartphones.

We want the confidence that the people on the other end are who they claim to be.

SafeSlinger, a new mobile app from Carnegie Mellon CyLab researchers, provides that confidence and more.

“With SafeSlinger, users can gain control over their exchanged information through end-to-end encryption, preventing intermediate servers or service providers from reading their messages or other sensitive stored data in their smartphones,” said Adrian Perrig, technical director of Carnegie Mellon CyLab and a professor of electrical and computer engineering.

Perrig along with Michael W. Farb, a CyLab research programmer, Jon McCune, a CyLab research systems scientist, and CMU students Gurtej Singh Chandok and Manish Burman developed SafeSlinger to help mobile phone users safely and privately retrieve information from trusted sources.

“SafeSlinger gives you with the confidence that the person you are communicating with is actually the person they have represented themselves to be,” Farb said. “Perhaps the most impressive feature is that SafeSlinger provides secure communications and file transfer even if the servers involved are tainted with malware.”

As more and more consumers access the Internet from an ever-expanding pool of mobile devices, including smartphones and tablets, Web-based threats continue to become more frequent and increasingly sophisticated.

“We increasingly lose control over our data. But SafeSlinger’s user-centric security design includes an advanced protocol, which incorporates elements of several cryptographic schemes and factors in the prevention of numerous types of attacks,” Perrig said.

Perrig is a 2006 winner of the Sloan Research Fellowship for securing sensor networks and a 2004 recipient of a Career Award from the National Science Foundation for work on secure and resilient sensor network communication infrastructure.

“SafeSlinger gives end-users the opportunity to secure their communications with a state-of-the-art, easy-to-use Android smartphone app, without relying on obscure mechanisms,” McCune said. “SafeSlinger provides users with an easy way to securely exchange messages for free, finally providing people with control over their own information.”

SafeSlinger is available for Android 2.1 and iOS 5.0 devices.
Lecturer Spotlight: Gardener to Offer Tips on Taming Wildflowers

Heidi Opdyke

One way to spend your Earth Day is by learning more about plants in your own backyard.

Gardener John Totten will be delivering a lecture titled “Wildflowers in the home garden” at 2 p.m., April 22 at the Hunt Institute.

“Gardening with native plants can be not only of interest to gardeners, but even people who don’t think of themselves as gardeners,” Totten said. “To someone that enjoys the outdoors and wild places, the opportunity to live with these wild plants close at hand daily is a special treat.”

Totten said that many homeowners are looking to make landscapes more sustainable and natives serve an important role in things such as rain gardens. He said it’s important to know which plants would be found in similar conditions in the wild and called his most important tool a pair of hiking boots.

“This is what makes developing a landscape with native plants such an all-encompassing form of gardening. There is both art and science involved in this process of distilling, intensifying and translating the observations you make in the wild to your own backyard.”

Plus, by growing native plants, they allow people to learn more about their region.

“That damp spot in the shade in the backyard can remind you of a floodplain forest you saw along Slippery Rock Creek, where you might have noticed how Virginia Bluebells flowered there in the spring and were followed by Turk’s Cap Lilies in July,” he said. “When we only grow geraniums or tomatoes we never develop this natural curiosity about the wild places around us, and we begin to be less connected and value wild places less.”

Attendees will learn to evaluate their properties with an eye toward selecting suitable plants, purchasing them responsibly and growing them successfully.

“It is important to know that many vendors sell plants that are collected from the wild,” Totten said. “This practice has decimated wild plant populations, many located on federal lands, and responsible gardeners should always insist on nursery-propagated natives that have spent their entire lives in a nursery setting. If this is not designated on the packaging, ask. If they don’t know, go elsewhere.”

He said two of his favorite places to purchase responsibly grown natives from nearby seed sources are the Audubon Center for Native Plants at Beechwood Farms in Fox Chapel and Sylvania Natives in Squirrel Hill.

Some of the groups Totten has consulted with include the Audubon Society, The Pittsburgh Zoo and PPG Paints Arena. He also teaches classes in the Sustainable Horticulture and Landscape and Garden Design certificate programs through the Phipps Conservatory and Botanical Gardens.

The lecture is part of a series of free talks by the Hunt Institute on Pennsylvania’s native plants as part of its current exhibit, “Native Pennsylvania, A Wildflower Walk.”

Slapshot Science

Fonseca Shares the Math Behind Hockey in Video Series

Jocelyn Duffy

As the hockey playoff season begins, fans across Pittsburgh and Carnegie Mellon’s campus will be tuned in to watch as the Pittsburgh Penguins battle for the Stanley Cup.

When Professor Irene Fonseca watches hockey, she sees things from a mathematical perspective.

National Science Foundation-funded researchers, including Fonseca, and National Hockey League (NHL) players are highlighting the scientific principles at play in “Science of NHL Hockey,” a series of video tutorials produced by NBC Learn, the educational arm of NBC News, in partnership with the NSF. The videos use concepts in hockey to illustrate fundamental science.

In one video, Fonseca explains the role vectors play when two players pass the puck to one another, and in another she talks about how rink managers take mass, volume and density into account as they create the ultimate skating surface.

“Math is everywhere, but kids often think of math only in the context of classroom exercises. If we show kids that math is much more than pencils and paper — it’s hockey or it’s music — they’ll be excited to learn more,” said Fonseca, the Mellon College of Science Professor of Mathematical Sciences.

The videos first aired during NBC’s coverage of the NHL All-Star Game in January, and are being shown on the NHL Network in the United States and Canada. They also appear during games on the Jumbotrons in select arenas throughout the league.

The series of 10 videos also are available for free at NBCLearn.com and Science360.gov, where they will eventually be accompanied by lesson plans developed by the National Science Teachers Association.

“Wayne Gretzky once said, ‘The only way a kid is going to practice is if it’s total fun for him’ … and it was for me,” said Morris Aizenman, senior scientist for the NSF Directorate for Mathematical and Physical Science. “‘Science of NHL Hockey’ is an NSF and NBC Learn project that continues our effort to make science total fun for students. We hope, after watching these videos that students will also want to learn and practice science.”
Travel Breaks

Faculty, Staff, Alumni Link Students With Short-Term Study Abroad Opportunities

Abby Simmons

With fresh spring break memories and summer just ahead, travel is on many students’ minds.

But, while some may be thinking of studying abroad, not all students have room in their schedule for a full semester away. Faculty and staff can assist these students in finding creative alternatives during academic breaks.

According to data published in November 2011 from the Institute of International Education, nearly 57 percent of U.S. students who studied abroad from 2009 to 2010 completed experiences lasting fewer than eight weeks during the summer or academic year.

Alycia Finger (TPR’13) and Christine Hedden (A’13) earned funding for a program for undergraduate women without international experience for trips to Italy and Ireland, respectively.

The Vira I. Heinz Scholarship Program for Women in Global Leadership annually selects up to three students at each of 10 participating Pennsylvania universities.

Jaycie Galbraith, coordinator of study abroad and international programming in the Office of International Education (OIE), said the program is facilitated by the University of Pittsburgh and funded through the Heinz Endowments. Participants attend leadership retreats, receive up to $5,000 for expenses and plan a community engagement experience when they return.

Hedden, a music composition and viola performance double major, studied Irish culture, music and dance at the University of Limerick. She jumped at the chance to take a course from a world-renowned Irish fiddler.

“It was absolutely amazing to hear Martin Hayes talk about music and performance,” Hedden said. “He wasn’t afraid to talk about things in music that are really important — like playing from your heart — things that I feel a lot of times in an intellectual world get looked over or taken for granted.”

This summer, Leah Yingling (E’13) will study education in South Africa, and Natalie Severson (BHA’13) will study arts and culture in France through the program.

Spring Break Studies

Another path to short-term study abroad is through faculty-organized trips.

Naun Kats, undergraduate adviser and adjunct faculty member in the History and Modern Languages departments, returned from his fourth spring break trip for his Culture of St. Petersburger course.

“We are living in a global world, but we are villagers,” Kats said. “Seeing people, talking to people helps to destroy stereotypes of the Cold War.”

Steven Quintero (E’13) said the trip, which also included a stop to Stockholm and its city hall, included visits to the former Russian capital’s St. Isaac’s Cathedral, the State Hermitage Museum, and the apartment of “Crime and Punishment” author Fyodor Dostoevsky.

Kats said Galbraith and fellow study abroad coordinator Chris Menand were important resources for the trip. They helped students fill out paperwork, hosted a pre-departure orientation and promoted a post-trip presentation.

“We’ve posted a guide for faculty members interested in organizing international trips on OIE’s website,” Menand said. “It covers the behind-the-scenes work needed to organize the trip, make sure it qualifies for CMU credit and provides forms for gathering ‘in case of emergency’ information.”

Grants Abroad

The Fellowships and Scholarships Office also offers funding for international experiences.

One of those programs is an extension of the Small Undergraduate Research Grant program called iSURG. Stephanie Wallach, assistant vice provost for undergraduate education and director of the Undergraduate Research and Fellowships and Scholarships offices (FSO), said students can apply for iSURG grants of up to $500 to conduct research while studying or traveling abroad.

The FSO also facilitates the Jennings Family Bands Community Fund. Trustee Larry E. Jennings Jr. (S’64 TPR’87) and his wife, Katherine, established the fund to allow students to visit developing countries to study, travel, conduct research and volunteer during summers.

Last year, Kimberly Josephson (DC SHS’13) and Priska Ohito (BHA’13) traveled to Argentina and Brazil, respectively.

Ohito said, “During those five weeks of travel, I volunteered to teach eight Brazilian young men supplementary English lessons. This experience certainly changed and sometimes reinforced ideas I had about national, gendered and class-based divisions.”

The Jennings family increased its commitment in 2012 and will provide up to $6,000 for each of the following students’ international experiences: Adelaide Agyeumang (A’14), Ghana; Ashley Brienza (E’13), Zambia; Vivian Chang (SHS’13), Costa Rica; Sara Faradji (DC’13), South Africa; and Sara Mouhkat (DC’13), South Africa.

News Briefs

Grant Expands Crowdsourcing of RNA Design

Researchers at CMU and Stanford are expanding ElseRNA — a unique research project that taps online game play to create RNA designs that are then tested in a laboratory — thanks to a $1 million grant from the W.M. Keck Foundation.

The additional funding will allow scientists to test thousands of player-designed molecules each month. Until now, only about 32 of the designs could be evaluated monthly.

Staff Council Hosts Children to Work Day

Registration for this year’s Take Our Daughters and Sons to Work Day (Thursday, April 26), sponsored by Staff Council, is open until April 20.

The event is for girls and boys between the ages of 9 and 15. “Building Opportunity,” is this year’s theme and the format has been updated.

Following the lunch program, sessions will be held at 1:15 and 2:15 p.m. For the first session, students can choose a “Mind” or “Body” session, featuring “MadScience,” a Pittsburgh company specializing in fun educational science programs, and activities with the Athletics Department staff. The second session is a choice of “College Stations” with presenters from CMU’s various academic programs. All sessions take place in the University Center.

For more information and to register your child, go to www.andrew.cmu.edu/org/todtw or contact Chris Nolan at cnolan@andrew.cmu.edu. Volunteers are needed for the event, and times can be just for an hour. If interested, contact Giselle Grunder at gggrunder@andrew.cmu.edu.

CMU To Aid Pittsburgh on IBM Smarter Cities Challenge Grant

The City of Pittsburgh was selected as one of 33 worldwide recipients for the IBM Smarter Cities Challenge grant, the award, which was announced March 15 by Mayor Luke R. Frieden, will provide Pittsburgh City Planners with IBM analysts who will live in Pittsburgh for at least three weeks and provide “intelligent technology” services worth the equivalent of $400,000. IBM analysts will aid the city in developing its first 25-year comprehensive transportation plan called MovePGH through research and data generated by urban interactions and transactions.

Carnegie Mellon Wins Better Building Challenge

A team of graduate students won “best proposal” in the U.S. Energy Department’s 2012 Better Building Challenge, a prestigious national competition that challenges college students to develop novel solutions to boost energy efficiency of buildings nationwide. The CMU team won for developing an energy-efficient plan for a case study involving Walter Reed Army Medical Center.

Team members included: Enes Hesogar, a Ph.D. candidate in engineering and public policy from Istanbul, Turkey; Erica Cochran, a School of Architecture Ph.D. candidate in building performance and diagnostics from Brooklyn, N.Y.; Colleen Luken, a Ph.D. candidate in engineering and public policy from Bethesda, Md.; Donald Johnson, a Topper School of Business MBA student from Pittsburgh; and Farhad Farahmand, a Heinz College master’s degree student in public policy and management from Berkeley, Calif.

Bohman Named Head of Mathematical Sciences

Tom Bohman has been named the new head of the Mellon College of Science’s Department of Mathematical Sciences.

Under this appointment he also will receive the Alexander M. Knaster Professorship, which was established in 2006 to recognize the departmental leadership.

Bohman succeeds Roy Nicolaides who served as department head from 2002 through May 2011. During the interim, Bill BiHu served as acting department head.

Programs Retain No. 1 Rankings in US News

Two Carnegie Mellon graduate courses of study — information and technology management at the Heinz College and multimedia/visual communications at the College of Fine Arts — have held on to their number one rankings in U.S. News & World Report’s 2013 “America’s Best Graduate Schools.” Both programs were ranked No. 1 in 2009, the last time U.S. News & World Report rated programs in these categories.

In other 2013 graduate rankings, CMU’s
A team of first-year students from the Mellon College of Science placed second in the Mathematical Association of America’s William Lowell Putnam Competition, the premier mathematics contest for undergraduate students.

This year, the Putnam Competition engaged 4,440 American and Canadian undergraduates from 572 institutions in a six-hour math marathon. During the competition students attempted to solve 12 complex mathematical problems using a combination of concepts taught in college mathematics courses and creative thinking.

“This remarkable success is a reflection of the high caliber of students in Carnegie Mellon’s Department of Mathematical Sciences, as well as a reflection on the students’ hard work and dedication,” said Po-Shen Loh, assistant professor of mathematical sciences and the team’s coach. “At Carnegie Mellon we have developed an innovative undergraduate program, which leads the brightest undergraduate mathematicians to achieve their full potential.”

The three students on the second-place team, Michael Druggan, Albert Gu and Archit Kulkarni, are all first-year students and Knaster-McWilliams Scholars. The Knaster-McWilliams Scholars program, which has been fully funded by a physics alumnus and a mathematics and electrical engineering alumnus, is one of only a few scholarship-supported programs in the country that is also paired with an honors program that features increased access to faculty and early research opportunities. The first five participants entered the program at the beginning of the 2011-2012 school year. Mellon College of Science Dean Fred Gilman, who was a part of Michigan State University’s first-place Putnam team in 1961, said, “Congratulations to the team and to John Mackey, Po-Shen Loh, and others whose years of effort have created an outstanding undergraduate program in mathematical sciences and made this result possible.”

The second-place finish marks CMU’s highest showing in the 73-year history of the Putnam Competition. The university’s team has placed in the top five three other times, ranking third in 1987, third in 1949 and fourth in 1946. CMU’s Department of Mathematical Sciences will receive $20,000 for the second-place finish, and each team member will receive $800.

In addition to the three members of the second-place team, more than 100 students from CMU participated in the Putnam Competition. Individually, Druggan and Gu ranked among the top 10 and Benjamin Alpert, another first-year student at CMU, ranked in the top 25.

Computerworld Honors HGI’s MILLEE Project
The Human-Computer Interaction Institute’s (HCII) Mobile and Immersive Learning for Literacy in Emerging Economies, or MILLEE, project has been named a 2012 Laureate in the Computerworld Honors Program. The program honors visionary applications of information technology promoting positive social, economic and educational change. Assistant Professor Matthew Korn leads the MILLEE project, which is using educational mobile phone applications to help children in the developing world acquire language literacy in a game-like environment. MILLEE is now completing a yearlong pilot of its second-generation English literacy games with 250 children in four low-income schools in India.

EH&S Offers Emergency Response Video Training
Last month’s shootings at Western Psychiatric Institute and Clinic emphasize the need for all of us to be prepared should there be an active gunman on campus. Environmental Health & Safety has placed a video on its website at https://www.cmu.edu/ehs/emergency-response/restrict/index.html that provides potentially life-saving information on how to respond to a similar situation arise at CMU. All members of the university community are strongly encouraged to view this video. EH&S also will come to your department to provide additional training if you’d like. Training drills also can be arranged. To schedule such a drill or training session, contact Jim Gindlespenger at 412-268-3760.

CMU To Host Ultimate Frisbee Camp
This summer, CMU will again play host to Camp Spirit of the Game, Pittsburgh’s Ultimate Frisbee camp for kids. Professionally run by Andy Norman of CMU’s Philosophy Department, Camp Spirit features an introduction to this exciting sport and a fun assortment of swimming, games and lessons in constructive conflict resolution. For boys and girls between the ages of 7 and 14, Camp Spirit has sessions that run from June 18 to July 27. To sign up or learn more go to www.camposp.com or call 412-242-7117.

Soccer Captain Awarded NCAA Scholarship
Senior captain Nick Gianopoulos of CMU’s men’s soccer team has been awarded an NCAA Postgraduate Scholarship. Gianopoulos will receive a $7,500 grant to be used for post-graduate study. The scholarships are awarded to student-athletes who excel academically and athletically and who are in their final year of intercollegiate athletics competition. The mechanical engineering major carries a 3.91 GPA and is working with Professor Red Whitaker and his team to design and implement part of the propulsion system of the lunar lander for the Google Lunar X-Prize Team.

Hurdlers Earns All-America Honors
CMU sophomore Jacqueline Guevel earned All-America distinction with a fourth-place finish in the 60-meter hurdles at the 2012 NCAA Division III Indoor Track and Field Championships last month at Grinnell College in Waverly, Iowa. Guevel crossed the finish line in a school-record time of 8.76 seconds. Guevel, earned All-America honors in the indoor 55-meter hurdles and the outdoor 100- and 400-meter hurdles last season. She is the 28th All-American under Head Coach Daro Donatelli.
locations within the genome.

These findings provide a basis for future gene discovery, diagnostics and therapeutics.

“Prior to the advent of new DNA sequencing technology, we were largely wandering around in the dark, lucky to pick up one autism gene at a time,” said Matthew State, lead author of one of the studies and the Donald J. Cohen Professor of Child Psychiatry, Psychiatry and Genetics at Yale University.

“Now we are getting a much better sense of what the genetic landscape looks like and have the tools in hand to find many more autism genes as we continue these experiments.”

In the first study, sequencing all of the genes of families with healthy parents, who have one child affected with autism and another not, shows that spontaneous mutations at conception contribute to risk in nearly 15 percent of autism cases. These results complement previous findings.

The study also revealed that the mutations were more frequent in children born to older fathers.

Yet not all de novo mutations, as they are called, affect risk. Results from a second study found that most newly arisen mutations seen in autism patients have no impact on risk.

Most people likely carry a de novo mutation somewhere in their genes, a striking result seen across the studies. When new mutations do confer risk, they don’t pile up in a few genes, showing that there are hundreds of autism genes scattered across the human genome.

Roeder, professor of statistics and computational biology at CMU, and Devlin, associate professor at Pitt’s departments of Psychiatry and Human Genetics, worked on the statistical analysis of the gene sequencing.

“A major implication of identifying the de novo mutations is that it provides a clear path forward for genetics research into the underpinning of autism,” Roeder said.

“From a statistical perspective, these kinds of data give us a roadmap for developing analytical methods for even deeper inference, including further investigating functionally related genes together with the de novo sequence to redefine the neurobiology of autism.”

Devlin said, “For example, there is a 500,000 base-pair region on chromosome 16 that is susceptible to deletions and duplications, and these events affect risk for autism. About one percent of all individuals diagnosed with autism carry deletions or duplications of this region in their genomes, perhaps twentyfold higher than the general populations.”

Devlin added, “The region contains over 20 known genes, and which ones — if any — affect risk for autism is unknown. We are developing statistical methods to use de novo events falling in those regions to identify even more autism risk genes.”

The Simons Foundation, the National Institute of Mental Health and the National Human Genome Research Institute funded this research.

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**April is National Autism Awareness Month**

April is National Autism Awareness month, and Carnegie Mellon has provided explanations for some of autism’s mysteries. Read more at www.cmu.edu/homepage/health/2012/spring/leading-autism-research.shtml.

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**Rally for Trayvon Martin**

Students, faculty, staff and community members gathered at the fence on Monday, March 26 at the Justice Rally for Trayvon Martin, the 17-year-old shot to death in Florida by a neighborhood watch volunteer on Feb. 26. Speakers at the rally urged attendees to discuss the role of ethnic/racial profiling, stereotypes and judicial bias and called for further investigation by law enforcement. A voter registration drive followed the rally.

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**Left:** Activist Kimberly Ellis, a scholar of African-American studies, urged people not to overlook local communities, where they can impact change the most through their actions.

**Above:** Carnegie Mellon Black Graduate Student Organization Vice President Brittany Cloud and President Ricky Burgess helped organize the rally.

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