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Penn's Crisis Management and Crews Dealt with Hurricane Sandy

The University of Pennsylvania managed to escape the worst impact of Hurricane Sandy, but regardless of what might have happened, Penn was ready.

The University's Crisis Management Team, chaired by Provost Vince Price and Executive Vice President Craig Carnaroli and comprised of senior administrators, met before the hurricane to assess the situation and determine the course of action the University would follow to ensure the safety and security of the Penn community. Meanwhile, an operations group made up of about 75 representatives from the campus units necessary to provide services during a crisis—including Business Services, Public Safety and Facilities and Real Estate Services (FRES)—gathered to coordinate the plans of action.

While the crisis team made the call Sunday morning to close the University on Monday and Tuesday, October 29-30, Public Safety began preparations even earlier. DPS expanded tours of duty for officers already scheduled to work and upped the staffing levels. The Division was then ready when word came down at 4:30 a.m. on Monday to open the Emergency Operations Center in the Public Safety building.

"We were beyond fully staffed," said Maureen Rush, vice president for public safety, who oversees the emergency operations center. "Some stayed overnight to be sure they could be there for work the next day in rooms set aside at the Sheraton and Homewood Suites or on air mattresses in the Emergency Operations Center."

VP Rush met often during the weather emergency with Anne Papageorge, vice president for FRES, and Marie Witt, vice president for business services, at the operations center to coordinate the University's services.

Penn Police, together with Allied Barton security officers, helped transport both University and Health System staff, as needed, to and from their homes or 30th Street Station. Business Services opened campus parking lots for staff who normally take public transportation to work.

"We worked closely with the Health System," said Ms. Rush, who brought her pet Bichon dog Stella along to keep everyone's spirits up. "She was a little cheerleader."

Ken Ogawa, executive director of operations and maintenance, and Ed Datz, executive director of real estate, in FRES, said their staff had adequate time to prepare and take preventive measures such as clearing drains and window wells, fueling generators and sandbagging doorways of buildings that are prone to flooding.

On Monday, October 29, the day Hurricane Sandy swept through, the day-shift staff of about 350 tradesmen and housekeepers were on site "so we could take care of any issues immediately," Mr. Ogawa said. About 50 more staff were added to that day's second and third shifts.

"Also during the event, contractors voluntarily came in to make sure their construction projects were safe," he said.

Business Services' offices of residential and hospitality services were also well prepared.

"We made serious preparations Thursday and Friday, getting food in and moving supplies around," said Doug Berger, executive director in charge of those two offices.

"We had 500 cases of bottled water at the ready," said Pam Lampitt, director of business services overseeing hospitality services.

Mr. Berger and Ms. Lampitt were two of the 26 Business Services' staff who remained on campus Sunday through Tuesday, including information desk staff in the residence halls and food-service managers who oversee the Bon Appétit Penn Dining operations. The all-you-care-to-eat dining facilities were open to students and those staff members who were on campus for the duration of the emergency.

"We were well prepared to offer bagged meals had the power gone out or if the storm had lasted longer, even prepared to take food to the students in the residence halls, if necessary," Ms. Lampitt said, "and we felt responsible to feed the essential staff who were on campus in addition to the students."

John Eckman, director of business services in charge of residential services, is particularly proud of the building administrators and information-desk staff in the college houses who remained on campus.

"They checked drains and looked out for open windows to prevent flooding, everything to keep everyone safe and secure," he said.

Meanwhile, Mike Fink, deputy chief of police in charge of tactical and emergency readiness, had high praise for the teamwork by the grounds staff.

"When Public Safety told them there was a tree down on Walnut Street blocking two lanes, FRES had it cleared within 30 minutes," Deputy Chief Fink said.

The emergency operations center remained open until 3 p.m. on Tuesday. At that point, he said that the Crisis Management Team determined that the majority of issues had passed and it was safe for Penn to return to normal operations.

"What was great to see was the *esprit de corps* that occurred," Ms. Rush said. "Everyone across the board would do anything to help one another. They all chipped in to do whatever it took to make this a safe event. Also, the Crisis Management Team members communicated and made sure the messaging got out. That helped parents," she said.

"We were lucky in the sense that it wasn't as bad as it could have been," Mr. Ogawa said. "The forecasters did a good job and were pretty accurate. Sandy stayed on the timeline."

Penn was spared any extensive damage. There were damaged windows at the Van Pelt Library and at the Richards Lab, a strip of flashing torn from Golkin Hall, a door blown out at Mayer Hall, a few downed trees and minor flooding.

"The safe and responsible coordination and cooperation by all of our on- and off-campus community members through this historic event was noticeable and appreciated," Ms. Papageorge said.

\$2 Million Grant from NCI's New "Provocative Questions" Grant Program Funds Novel Neuroscience Approach



Caryn Lerman



Joseph Kable

Most people know that smoking, a bad diet, and physical inactivity can lead to catastrophic personal health consequences, including cancer. Yet millions continue to smoke, eat poorly, and fail to get enough exercise. A new project led by researchers from the Perelman School of Medicine and the School of Arts & Sciences at the University of Pennsylvania aims to devise programs that help individuals change these risky behaviors and cut their risk of cancer.

Dr. Caryn Lerman and Dr. Joseph Kable have been awarded a \$2 million grant through the National Cancer Institute (NCI) initiative called "Provocative Questions" which will allow them to study how the brain's cognitive control system can be enhanced to improve decision-making processes that contribute to risky behaviors.

Dr. Lerman is deputy director of the Abramson Cancer Center and Mary W. Calkins Professor in the department of psychiatry in the Perelman School of Medicine and in the Annenberg School for Communication. Dr. Kable is the Baird Term Assistant Professor of Psychology in the College of Arts and Sciences at the University of Pennsylvania.

One might think that people would be scared into doing the right thing as far as protecting their own health, but for some people changing bad behaviors proves difficult or impossible, especially when those activities involve addictions like smoking or overeating. Dr. Lerman and Dr. Kable's proposal will break new ground by applying novel concepts and tools from behavioral economics and cognitive neuroscience to improve understanding of the brain-based decision-making that lies behind those risky behaviors.

The underlying premise, based on earlier re-

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Honors & Other Things

RWJF Young Leader Award

The Robert Wood Johnson Foundation (RWJF) announced that *Dr. Raina Merchant* and *Dr. Scott Halpern* of the Perelman School of Medicine, have been selected to receive the inaugural RWJF Young Leader Award. The award recognizes leaders ages 40 and under for their exceptional contributions to improving the health of the nation. Penn is the only institution—public or private—to have more than one winner honored. Each recipient will receive \$40,000.



Raina Merchant

Dr. Merchant is an assistant professor of emergency medicine and a senior fellow in the Leonard Davis Institute of Health Economics. An expert in treatment for cardiac arrest, which is among the nation's top killers, her research focuses on the creation and dissemination of new media-driven

tactics for improving survival from this deadly condition for resuscitation science. As the creator and director of the MyHeartMap Challenge, a mobile phone-fueled crowdsourcing contest that mapped the locations of automated external defibrillators, she made Philadel-

phia the first city in the nation to have a map of these lifesaving devices (*Almanac* January 17, 2012). That data will now be used by 911 operators and bystanders to locate the nearest AED for bystanders to use during cardiac emergencies before EMS arrives.

Dr. Halpern is deputy director of the Center for Health Incentives and Behavioral Economics at Penn and an assistant professor of medicine, epidemiology, and medical ethics and health policy. He is also the founding director of the



Scott Halpern

Fostering Improvement in End-of-Life Decision Science (FIELDS) program, which created a multidisciplinary team of Penn faculty working toward the common goal of improving the timing, content and outcomes of the end-of-life decisions made by patients, family members and providers. By translating knowledge from the fields of economics, psychology, medical ethics and epidemiology, the multidisciplinary teams he has built test a variety of scalable—and hence, sustainable—interventions to improve health-related decision making, particularly in such charged but critical areas as end-of-life care.

\$4.9 Million Grant for Penn Researchers to Explore Use of Brain Training

(continued from page 1)

search by Lerman, Kable, and their colleagues, is that through neurocognitive training, it is possible to improve the brain's capacity to strengthen cognitive control circuits to alter decision-making that results in risky behaviors, which over time may lead to a variety of medical conditions, including cancer.

"If our intervention produces the effects on brain function and decision making that we anticipate, it can be readily used in a broad population," said Dr. Lerman. "It may be possible for people to learn how to activate brain networks that help them to resist smoking or overeating. These treatments could be stand-alone approaches or used in combination with medications, such as in the case of treatment for nicotine addiction or obesity."

Specifically, the brain's executive function network supports self-control via increased sustained attention to and memory of long-term goals, goal-directed decision-making, enhanced ability to weigh the pros and cons of different choices and inhibitory control. Thus, assessing such cognitive functions as sustained attention, working memory, and response inhibition will help understand how neurocognitive training can improve decision-making processes. This information, in turn, will be valuable for designing more novel and comprehensive interventions for behavior change. In short, the research team says, changing the brain through training may change behavior and thus improve health.

This randomized clinical trial with neuroimaging will involve 150 young adults aged 18 to 30 who will take part in a neurocognitive training program or in an alternate program for cognitive stimulation. The study will target young people, since early adulthood is a critical period for establishing lifestyle behaviors that persist into adulthood. More than one in four young

adults aged 18 to 25 report having used tobacco in the past month. Roughly 42 percent of young adults are overweight, with 16 percent meeting the criteria for obesity. These modifiable behaviors account for over 60 percent of cancer deaths and have a significant economic toll.

The field of behavioral economics has already shed light on the critical role of decision-making in behavior change. For example, people vary in how much they prefer rewards in the present over uncertain or delayed rewards later. Such differences can lead to personal decisions that increase the risk of cancer, such as choosing the immediate "reward" of smoking a cigarette now over the less risky, but delayed reward of better health later.

Participants will undergo functional magnetic resonance imaging (fMRI) testing during the trial while they perform decision-making tasks, both before and after training, to help assess the effects of the training on the brain. A three-month follow-up assessment will test the durability of the effects of neurocognitive training beyond the training period.

The study's authors aim to show if taking part in the neurocognitive training results in better decision-making and behaviors on the part of participants. Will they, for instance, forego the short-term, risky reward of smoking a cigarette or eating a fast food meal or use their newfound brain training to make decisions that pave the way to better long-term health?

The "Provocative Questions" project of the National Cancer Institute is intended to assemble a list of important but non-obvious questions that will stimulate the NCI's research communities to use laboratory, clinical, and population sciences in especially effective and imaginative ways. Fifty-six grants have been awarded across the country through this funding program.

Civic Design Review Committee: Mr. Garofalo

Mr. Dan Garofalo, environmental sustainability coordinator and senior facilities planner in FRES, has been named to the first Civic Design Review Committee of the City of Philadelphia.

The seven-member committee, mandated by the city's new zoning code, will advise the City Planning Commission as it reviews development projects that have a significant impact on public streets, sidewalks, trails, parks and open spaces. The committee will consist of six standing members and one rotating member, depending on the project's location.

SAE Fellow: Dr. Jackson

Dr. Andrew Jackson, professor of practice in the department of mechanical engineering and applied mechanics in the School of Engineering & Applied Science, has been named a Fellow of the Society of Automotive Engineers (SAE) for his "outstanding contributions in the field of tribology and lubrication science." Fellows of the SAE are long-term members who have made a significant impact on society's mobility technology through leadership, research and innovation.

Dr. Jackson is an internationally recognized leader in the field of tribology and lubrication science as a result of 35 years of industrial basic research and through his service to the technical community.

NIH Grant: Dr. Lewis

Dr. Lisa Lewis, assistant professor of nursing, has been awarded a National Institutes of Health R01 grant which will provide approximately \$1.9 million over the next four years for Dr. Lewis to continue research of adherence to medication in African-American men with high blood pressure. African-American men in the United States bear a disproportionate burden of uncontrolled high blood pressure when compared to other racial and ethnic groups.

The objective of Dr. Lewis's new study is to determine factors that are associated with poor medication adherence in African-American men with hypertension. Dr. Lewis will then lay groundwork for interventions to improve adherence.

Intel Schools of Distinction Award: Penn Alexander School

Penn Alexander School won the middle school science category at the Intel Schools of Distinction Awards in Washington, DC. Honored schools provide a rich, rigorous science or mathematics curriculum by incorporating hands-on investigative experiences that prepare students to be successful in the global economy. The award includes a cash prize, curriculum materials, professional development resources, hardware and software, valued at over \$100,000. Winners were selected from a pool of 18 schools recognized as finalists from 176 applications from 35 states.

Lunch Meeting About Coursera

The Center for Teaching and Learning's (CTL) first workshop for faculty interested in proposing Coursera courses (*Almanac* October 30, 2012) will be held on Friday, November 16, 11 a.m.-12:30 p.m.; it will assist faculty in the preparation of proposals. To register, email CTL at: ctl-help@sas.upenn.edu For more information about CTL resources, visit: www.upenn.edu/ctl

Ed. Note: See pages 3-5 which includes Ed Rock's presentation to Council on Penn's involvement with Coursera.

COUNCIL State of the University

At the October 31 University Council meeting, there were several comments alluding to the recent Hurricane Sandy which had left Penn's campus mostly unscathed in spite of the severe weather which caused much of the East Coast, including the University of Pennsylvania, to close on Monday and Tuesday of last week. The main focus of the meeting was the annual State of the University, which dealt with Open Learning and The Campaign for Penn.

President Amy Gutmann

How fortunate we've been to have weathered Sandy well. How proud I am of our staff, who have done a phenomenal job. Public Safety's been amazing, so let's give Maureen Rush a hand. Facilities and Real Estate Services, Student Life, VPUL, Business Services, everybody's done a great job. And I also have to say I'm very proud of our students, who really behaved responsibly throughout. Now I turn it over to our moderator, Dr. Pyeritz.

Dr. Reed Pyeritz

Thank you President Gutmann, welcome to all of you who now know what it's like to compete on *Survivor*. I'm reminded to ask you when you do speak, speak directly into a mic. Also, the status reports were distributed electronically; any of the composers of those have anything to add? Dan?

Dan Bernick (UA)

Just echoing Dr. Gutmann on behalf of the undergraduates at Penn, we want to thank all of you and the University community for your response to the storm. Forgive the pun, but we were *blown away* by the dedication of the Public Safety officials and the essential service providers on campus who made sure that students were safe, comfortable and well-informed throughout the duration of the storm. So on behalf of all of us, thank you for your hard work.

President Gutmann

Thank you very much. This year's State of the University presentation includes something dramatically new that none of us had actually predicted, but it's a case of good fortune where opportunity meets preparation. We are now partnering with Coursera and embarking on a bold experiment in online education that has the potential for disseminating high quality knowledge and understanding like never before. I just want to say one of the great privileges and thrills of being president of a wonderful university is being able to do something new that has the potential for increasing access to what we do, for our alumni, for people in this country and around the world, and also to transform the way education happens in Penn's classrooms. Later in this meeting, the Provost will speak more about that, as will our senior advisor to the president and the provost and the director of our new online education initiative, Professor Ed Rock.

In a moment I'll also call on Vice President for Development and Alumni Relations John Zeller, to share more about our campaign accomplishments to date. It's true that our *Making History* campaign, which has raised more money than all the previous campaigns in Penn's history combined, has really enabled us to do so much for students, for our teaching enterprise and for our research enterprise. So, the momentum is high. I just want to point out a few things that are happening on the ground that are illustrations of our momentum.

As I like to say, if the students are Penn's heart and soul, the faculty are our brains. Among the outstanding faculty and leaders joining Penn this year, Provost Price and I were pleased to announce this month that Drs. Doubeni and Mendoza are Penn's newest Presidential Term Professors. We welcome them as eminent scholars who also diversify our faculty. It's a very important part of the Faculty Diversity Plan that we are losing no time whatsoever in recruiting some of the most eminent faculty from around this country and the world.

We also welcome two superb new leaders at the helm of Penn's signature cultural institutions: Dr. Amy Sadao, who is now the director of our Institute of Contemporary Art, and Dr. Julian Siggers, who is the director of the Penn Museum of Anthropology and Archaeology. Those of you who haven't recently gone to either the ICA or the Penn Museum, I encourage you to do so. The exhibits there are phenomenal.

As I just mentioned, we also named a new senior advisor who you'll hear about soon, Ed Rock. With that, I'll turn it over to Provost Vince Price for the first part of the State of the University address. So, Provost Price, you're on.

Provost Vincent Price

Thank you. As it turns out, Sandy did not bring all that much thunder, so we've saved it for today. We all came to Penn to be at the center of the action. Few of us thought we'd be literally in the eye of the hurricane, but I'm pleased to say that the State of the University today is both calm and dry.

More generally, Penn is absolutely a dynamic hub of world-leading research and teaching. I could draw on numerous examples of that dynamism, with new initiatives launched around the campus, but we have singled out one topic for our discussion today: Open Learning at Penn and the work we're doing in partnership with Coursera to explore new avenues of online teaching, public access to Penn's outstanding faculty, and new methods of teaching right here on campus.

As you may know, last April we launched Coursera with three partner institutions: Stanford University, Princeton University, and the University of Michigan. Since that time, Coursera has grown quite rapidly, to include more than a million and a half users, with close to five million course enrollments, and now has dozens of institutional partners. Penn has clearly led the way, developing more courses—and crossing a much wider disciplinary range—than any other Coursera partner institution.

I'm very pleased to have with us today, to talk with us about Coursera, our Director of Open Learning Initiatives at Penn, Ed Rock. Ed is the Saul A. Fox Distinguished Professor of Business Law in the Law School, with an appointment as professor of economics and public policy at Wharton. For a dozen years, he was co-director of the Institute of Law and Economics, which joins the Law School, Wharton, and the department of economics in the School of Arts & Sciences. So, he knows the University very well; and he is getting to know it that much better leading a project that brings together all 12 of Penn's schools—along with resources and units across the campus, ranging from the Penn Libraries to the Office of General Counsel—to marshal the collective energy of the institution and move forward on this very exciting new front. And with that I will turn things over to Ed Rock.

Edward Rock

Thank you, Vince. It is a pleasure to be here, and it is a genuine pleasure to have a role in pushing forward our Coursera partnership. In 100 years, people will look back on the Gutmann administration's decision to partner with Coursera as one of the most important and revolutionary decisions in higher education. It speaks enormously well of Penn as a university that we could take such a bold move and, moreover, that we were able to move as quickly and with as much consultation as we did, because this is a truly revolutionary endeavor.

Coursera started as a partnership between Daphne Koller and Andrew Ng, two computer science professors at Stanford, both of whom opened their computer science courses to worldwide enrollment. Andrew Ng teaches a course called "Machine Learning." He opened his Stanford course to the web and 100,000 people signed up. Because he is an expert in Machine Learning, he long ago figured out how to program his computer to grade quizzes and exams. So, the course scaled very effectively. And out of that success came the idea that one could provide access to huge numbers of students around the world to the riches of the university, that the platform would allow us to experiment with ways of delivering education, and that it all could be done in a sustainable way. Coursera has succeeded in drawing an international student body, with 60% of the students in Coursera from outside the United States. At any moment, night or day, there are 7,000 students on the site. Discussion boards form a key part of the Coursera platform, and, no matter what time of day, it takes on average 20 minutes for a student to get an answer to a query that he or she posts.

So what is Coursera? It is a platform, primarily, that offers courses from its partner universities. There are now 33 partner universities, drawn from the best universities in the world. When people want very high quality online courses from top universities, Coursera is the place to go.

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As Provost Price said, it has grown incredibly quickly; it reached a million users faster than Facebook, and now has more than 1.5 million users with over 5 million enrollments. What's most distinctive about Coursera is the "M" in "MOOC": "massive." These courses are massive. The Michigan Introduction to Finance course attracted 130,000 students.

As you can imagine, it didn't take long for Wharton to decide that it should put a finance course up on Coursera, and Franklin Allen, the star finance teacher who teaches 600 or so of the MBA students, who is also a sensational world-renowned economist, is preparing an MBA-level Coursera finance course that will have the Wharton and Penn logos on it. Peter Struck's Greek and Roman Mythology course gives a good example of a course landing page: the lectures are off the right; the social networking aspects are on the left, as are the quizzes and so forth (*at right*).

What is critical about a Coursera course is that it brings the best of learning science to bear. One of the most robust findings from the education literature is that active learning—by which I mean having some sort of assessment every 10 or 15 minutes—increases learning outcomes by about one standard deviation. Now, in my class, to give a quiz every 15 minutes would require someone to grade that quiz. Because computers never get bored, the Coursera platform is able to integrate ongoing assessment efficiently. This works for an absolutely intuitive reason: if you are sitting in a class and know that you'll be quizzed on the material every 10 or 15 minutes, you'll pay attention. And it turns out, of course, that paying attention increases learning outcomes.

Stanford and Penn have the most courses up on Coursera. Stanford's courses are primarily computer science courses. Penn's courses showcase the riches of this great research university, with courses from the medical school—Emma Meagher's Fundamentals of Pharmacology, Paul Offit's course on vaccine science, John Hogenesch's graduate level course on genome science—to offerings from Wharton—such as Kevin Werbach's Gamification course and Christian Terwiesch's Operations Management course—to great courses from the liberal arts.

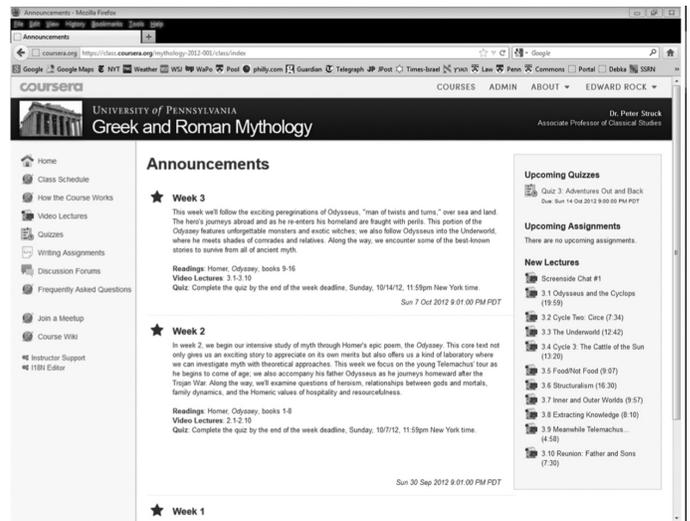
For me, the two most interesting and unexpected hits were Carol Muller's World Music and Al Filreis's Modern and Contemporary Poetry. I understood why the computer science courses could attract such dedicated students. For many IT jobs, what is important is what you can do, not your credentials. These courses teach a variety of skills that computer programmers (and hackers) around the world want to learn. But why did World Music and Modern Poetry attract thousands of students? The answer is the reason that the liberal arts remain at the core of great universities: they open your mind. Carol Muller's course pushes students to think about the nature of Paul Simon's "Rhythm of the Saints" collaboration with South African singing groups. Al Filreis opens the doors to modern poetry for anyone willing to read and listen. A wonderful NPR piece a few weeks back interviewed Dick Durbin, the majority whip of the Senate, who is enrolled in Al Filreis's course. Sen. Durbin accurately quoted a line from a poem by Emily Dickinson! Nobody is taking these courses for the skills that are taught. They are taking them to enrich their lives.

With 33 partner schools, it is easy to get lost. To position Penn as a distinctive and premier provider of high quality open learning, we have now launched our own web page (www.upenn.edu/provost/openlearning). I urge everyone to go check this out. Our courses are amazing. Take a look at the trailer for Rob Ghrist's single-variable calculus course (launching in January 2013). Professor Ghrist is reinventing the calculus textbook.

We are learning that there's no single model for what is a successful Coursera course or a typical Coursera learner. Each course finds its own audience. The audiences for machine learning and modern poetry are fundamentally different. Our courses find audiences that we never anticipated. There is an assisted living facility in New Jersey where ten 90-plus year old residents are taking Al Filreis's course together, as a group. They watch the lectures on a large screen television, and do the homework together, all without traveling.

So why are we doing it? For three principal reasons. First, Penn's core mission is the creation and dissemination of knowledge. We create most of the knowledge here on campus. We disseminate it on campus to full- and part-time students, to undergraduates, to graduate students, to professional students. We disseminate it in conferences around the world. We disseminate it in books and journals. The internet is clearly a "place" where Penn needs to be disseminating its knowledge, because that's how you reach people.

Second, and even more important, the Coursera experiment holds the potential to revolutionize courses here on campus. Take Rob Ghrist's single-variable calculus Coursera course with his beautiful hand graphics. As



soon as he finishes that course, his Math 104 class will be transformed, because now the Coursera course becomes the textbook for the live course. The assignment will no longer be "read pages 47 to 66 of the textbook and do problems 6 through 13." No, the assignment now becomes "watch module 4.1 of the course on Coursera, do problems 6-13, and when you come to class tomorrow, I'm not lecturing. We're going to do other things, we're going to do more important things, we're going to take advantage of what in-person face-to-face education can provide." Maybe Professor Ghrist will divide the students up into groups of five or six and give them harder problems and say, "solve them in a group." Or maybe he'll say, "in my lecture we talked about an application to microeconomics. Now let's talk about applications in biology." Or maybe somebody will say, "I didn't understand quite exactly how that proof worked." And he'll say, "well let's go into that again, let's go more deeply. Let's look at some other concepts."

Coursera offers the possibility of "flipping" the classroom. My hope is that Coursera will blow up the 19th century model of education, of frontal lecturing in a tiered classroom, a model which, for decades, we have known is not the most effective way of teaching. Once you've recorded your very best lecture and put it on the Coursera platform with assessments every 10 or 15 minutes that are machine graded, why would you stand up in front of a class and give the same lecture? Much better to use class time to take advantage of the face-to-face contact that allows you to engage in ways that are impossible on line.

Finally, we believe it will be a sustainable business model. Sufficient monetization opportunities will flow from a platform that already has 1.5 million users that we expect this to pay for itself.

Following the presentation there were questions and answers, including:

Q: As a graduate student, I've honestly heard a lot of fear amongst my peers and younger professors about what MOOCs could eventually wind up doing to the profession. How do we at this school see Coursera operating in a line that I think with our future hiring practices is essentially going to reduce the number of assistant level, entry-level jobs for professors? Is it going to marginalize the need for people to teach survey courses? Or how exactly do we plan on continuing to attract talent (particularly young talent) while utilizing Coursera? Do we have any way in which we're envisioning these two things working together?

A: (*Edward Rock*): I cannot speak for all of the universities, and I cannot speak to the hiring practices even at Penn, but I have heard this question before. For schools like ours, Coursera does not pose any threat, only opportunities. I know of no intention to use Coursera to displace instructors, only to enrich our teaching. If Coursera can get people to flip their classrooms, that will not change hiring practices but will empower teachers to do what they can do best—connect with students in face-to-face interactions in the classroom. Our head start in open learning that flows from our early partnership with Coursera will also provide graduate students with opportunities to learn how to teach through this new platform, skills that can give them a leg up in their careers.

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President Gutmann: Let me just say a little bit about the larger context because it's something I follow closely. Long before we joined Coursera, online education took off, and there are universities like the University of Phoenix that do everything online. That's not our space. But they do things online in no small part, I have to assume, because they can do it more economically that way, but they're not providing the kind of higher education we're providing. The kind we're providing is essentially tied to the kind of interactions that our students have with faculty and have with one another in a campus-based experience. So I can speak for Penn, and the other Ivy plus institutions in saying what Ed Rock has said is absolutely our plan. It is for us to provide the very best education in a campus-based setting where we will have no less of a need for the very best faculty at all levels, so it is not a fear that is well-directed at a place like Penn. I began by pointing out the University of Phoenix; if it weren't doing things online, it wouldn't exist, but if there were no online potential, and you wanted to provide cheap higher education, you would hire cheap labor to do it, not the kind of faculty we hire. So, one of the really amazing aspects of American higher education, which is really distinctive to this country, is how large our sector is, how varied it is, and the fact that it's

still the case and we want it to be the case for decades and decades to come, that the best American universities are the best in the world, and for us to remain the best in the world, we had better provide the best campus-based education. And that will include what we can teach students online, to supplement what our faculty does in the classroom. So I hope that gives you a really full, robust answer to the question. In short, this is going to supplement, not supplant, great faculty. And the faculty themselves are driving it.

Q: What about graduate students?

A. (*President Gutmann*): Graduate students are actually going to be even more important because graduate students and indeed some undergraduates may be working with the faculty members, are working with the faculty members to make these courses even better. So it will—as far as we're concerned—it will only enhance both the opportunities for faculty and graduate students.

They will monitor discussion boards and so on. They will be involved in this, in the same way as they would be involved in a person-to-person interaction.

President Gutmann said that John Zeller has been a phenomenal force for alumni relations and development.

John H. Zeller, Vice President, Dev. & Alumni Relations

I spoke with this group five years ago, soon after we'd kicked off one of the largest fundraising campaigns in the history of American higher education. The task was clear: Raise \$3.5 billion by December 31, 2012, to elevate Penn's capacity and reputation from excellence to eminence.

We already had an articulated vision in place for Penn's future as one of the nation's premier university research institutions, The Penn Compact. It was a solid foundation on which to build a Campaign, because it was comprehensive and multifaceted. Donors could define what mattered most to them—access to education, integrated knowledge, civic engagement, groundbreaking research and global connection—and we could demonstrate that Penn had the ability to make a real difference in all of these areas. Penn had a great story to tell, and there were opportunities for everyone to be involved.

Since then, the Campaign has strengthened virtually every corner of Penn, and enormous credit goes to the Deans, volunteers, staff, Trustees, Overseers, and so many others who have coalesced around this initiative.

Our donors have been generous. Our capital projects, such as Penn Park, the Singh Center for Nanotechnology, the Neural and Behavioral Science Building, Golkin Hall, the Music Building, the Perelman Center for Advanced Medicine, the expanded Libraries, the Roberts Proton Therapy Center, the Smilow Center for Translational Research... the list goes on. All of these were made possible in large part by private gifts.

Our faculty—the indispensable element at Penn—define the Penn experience for students and alumni. We have raised over \$530 million to date toward this Campaign priority, and launched the highly successful Penn Integrates Knowledge Initiative. As a result, we are better able than ever to recruit and retain the very best faculty and staff.

Increasing access to Penn is another Campaign priority. With just over \$600 million in commitments, we are building a more diverse and accomplished student body. Today, if you are a qualified undergraduate student without the financial resources to attend Penn, you have the financial aid that makes a Penn education possible. And we are providing the support that outstanding graduate and professional students need in order to advance their careers without the burden of insurmountable debt.

At the same time as we are transforming Penn into a model for 21st century higher education, the Campaign is ensuring our University's continued financial stability: We have reached our ambitious \$1.75 billion target for commitments to the endowment.

Commitment is an important word in this Campaign, especially when it comes to our donors. Our donors don't just pledge generously; they honor their commitments. As you know, our original Campaign goal was \$3.5 billion. As of today, we have achieved 99% (\$3.42 billion) of that goal in cash. Just think about that for a moment—what a testament to our loyal alumni, friends and donors, particularly given the economy.

Prior to the kickoff, we began with a “quiet phase.” In these final months, we have returned to that status. The numbers we are using publicly are from June 30 of this year, when overall Campaign commitments reached \$3.88 billion. The next time you hear a number will be when we announce our results on February 28.



Both a goal and a result of this Campaign has been to increase alumni engagement, and I'm proud to say that participation on and off campus has surged. New strategies, like Engaging Minds, the Alumni Inter-view Program, and an enhanced Homecoming Weekend, featuring Arts and Culture at Penn have created a new level of affinity. Now...

- If you are a year or two out of Penn and looking to stay connected, you can attend a yPenn event, or a Penn to You event (a weeknight version of Engaging Minds)—in cities around the country.

- If you are an alum living abroad, you can connect with one of the 122 clubs around the world to socialize and career network.

- If you are an alum of color or LGBT alum with an interest in celebrating diversity, you can attend a Penn Spectrum on the Road event, and you should definitely save the date for Penn Spectrum 2013 next fall.

With a 63 percent increase in engagement since 2007, welcome to our new norm in alumni activity!

With all of this success, I remind you that we are not finished. With 61 days remaining, we are racing against the clock, focused on filling the few remaining gaps of our highest priorities. When I return to speak to you again, I'll have more statistics and more insight into the success we've enjoyed.

But let me give you a glimpse of what we're working on after December 31 (other than my vacation beginning the first of January).

As I mentioned, we will publicly announce the final Campaign numbers on the evening of February 28. On April 19, we'll have a fabulous campus-wide party. Put it on your calendar. And then we'll begin our regional celebrations—across the region, across the country and around the world.

As we build on this momentum, we are thrilled that our president has extended her contract for another five years. Under her leadership, we will continue to advance our University.

We have already convened University leadership to begin articulating the future goals and objectives of the institution. President Gutmann has been meeting with the Deans to begin this process of refining both our highest priority institutional goals and school-based goals as we move into a new phase. While we don't anticipate a formal campaign, we will shift to initiatives including “evergreen” and programmatic priorities that will help define the case for support for the University and Schools and Centers going forward.

In short, I can promise you that under Dr. Gutmann's leadership, Penn's post-Campaign era will be defined by the same level of enthusiasm and immediacy that have characterized the past seven years.

POWER DOWN CHALLENGE 2012

Penn Buildings Competing in Power Down Challenge to Reduce Electric Use

Penn staff and faculty in 11 campus buildings are competing in this year's Power Down Challenge to see

which location can use the least amount of electricity during the three-week contest. The challenge is organized by the Green Campus Partnership and is designed to raise awareness about the steps members of the University community can take in their daily lives to conserve energy. It is part of Penn's larger commitment to reduce energy use by 17 percent by 2014, as outlined in the Climate Action Plan.

During the Campus Building Competition, which started Wednesday, October 31 and will run through Sunday, November 18, occupants of each building will be challenged to reduce their normal electricity usage. At the same time, students will participate in a College House Competition in

which residence halls will also try to outdo one another in energy reduction.

Every week, each building's energy consumption will be calculated, and the standings and results will be posted on the Power Down Challenge website, www.upenn.edu/sustainability/programs/power-down-challenge. All reductions will be compared to a unique baseline for each building.

New this year is an interactive software service called Building Dashboard that allows competitors to see the results of the latest meter reading for each building, commit to energy-saving actions, view the Green Campus Partnership's Twitter feed (@GreenPenn), and see what others are posting about the Power Down Challenge on Facebook.

"This Building Dashboard software provides a dynamic and visually engaging website designed to inspire collaboration and friendly competition," says Dan Garofalo, environmental sustainability coordinator at Penn. "It invites interaction and really gives the competition clear graphics and educational elements."

The Nature of Proof: A Symposium—November 9

The Williams Symposium on Proof, *The Nature of Proof: A Symposium* will take place Friday, November 9, 2-5 p.m. in the Michael A. Fitts Auditorium, Golkin Hall.

Speakers include Dr. Scott Aaronson, TIBCO Career Development Associate Professor of Electrical Engineering and Computer Science at MIT; Dr. Dennis DeTurck, the Robert A. Fox Leadership Professor in Penn's School of Arts & Sciences, professor of mathematics, and dean of the College of Arts & Sciences; Dr. Solomon Feferman, the Patrick Suppes Family Professor of Humanities and Sciences, emeritus and professor of mathematics and philosophy, emeritus at Stanford University; and David Rudovsky, Senior Fellow of the Penn Law

School and one of the nation's leading civil rights and criminal defense attorneys.

The symposium is sponsored by: The Thomas and Yvonne Williams Fund for the Advancement of Logic and Philosophy and The Provost's Fund for the Year of Proof.

The Thomas and Yvonne Williams Fund for the Advancement of Logic and Philosophy has been established at the University of Pennsylvania to expose a wide audience to the value of the correct application of reason. The fund will support a variety of educational activities including a university-level lecture series as well as lectures and seminars at the upper-school level.

Netter Center 20th Anniversary Conference: November 12-13

The Barbara and Edward Netter Center for Community Partnerships (*Almanac* October 2, 2007) celebrated its 20th anniversary in July 2012 (*Almanac* July 14, 1992).

An international conference on *The Role of Higher Education-Community-School Partnerships in Creating Democratic Communities Locally, Nationally, and Globally* is being held in celebration of this anniversary on November 12-13, at Houston Hall. For the conference agenda details and to register, see <https://www.nettercenter.upenn.edu/20th-anniversary>

The conference will feature various thematic panels on such topics as education, poverty, health promotion, community engagement and university-assisted community schools by University presidents, educators, administrators and professionals from across the country. Remarks will be given by Dr. Rebecca Bushnell, dean of the School of Arts & Sciences and professor of English; Craig Carnaroli, Executive Vice President; and Jeffrey Cooper, Vice President, Office of Government and Community Affairs.

President Amy Gutmann will present awards to the 20th anniversary honorees at the awards luncheon on November 12. The keynote address will be given by Randi Weingarten, president of the American Federation of Teachers.

Closing remarks will be made by Penn Provost Vincent Price followed by the closing plenary, *Where Do We Go From Here?: Presidential Perspectives on the Movement over the Next 20 Years*.

9 Perspectives on a Photography Collection

9 Perspectives on a Photography Collection, at the Arthur Ross Gallery runs November 10–January 27. This is the third in a series of exhibitions highlighting the University of Pennsylvania's Art Collection. This exhibition mines the extensive photography holdings in the University's Art Collection and includes some 90 images. Gabriel Martinez, senior lecturer in Penn's School of Design, is guest curator. Since September 2011, Mr. Martinez has surveyed and documented every photograph in the University collection, along with Heather Gibson, collections manager.

To mix things up, Mr. Martinez has invited his eight photography colleagues (who are also working artists) in the fine arts department, at the School of Design, to curate a few photos from their distinct point of view. *9 Perspectives* will bring the University's photography collection into an entirely new focus.

On Friday, November 9 there will be a *9 Curators' Panel Discussion*, 4:30-5:30 p.m., B-3, Meyerson Hall; and a reception 5-7:30 p.m. in the Arthur Ross Gallery, with remarks at 6 p.m. by School of Design Dean Marilyn Jordan Taylor; Lynn Marsden-Atlass, director of Arthur Ross Gallery and University Curator; and Gabriel Martinez, guest curator.

Last year, occupants of five academic and administrative buildings took part in the Power Down Challenge, with the Franklin Building taking the honors by reducing its electric consumption by more than 20 percent.

New buildings signing on for this year's Challenge include Hayden Hall, Division of Public Safety at 4040 Chestnut St., the Anatomy–Chemistry lab at the Perelman School, Huntsman Hall, Jaffe Bldg., the Pottruck Center and Steinhardt Hall.

To reinforce the competition's energy-saving messages, the Green Campus Partnership website includes easy energy-reduction tips to share with colleagues, as well as posters available for download that can be used throughout buildings, offices, or classrooms.

Penn HR: New Website

If you visited Penn's Human Resources website recently, you probably noticed some big changes. From a bold, new design to more user-friendly navigation, the new HR website is not only easier on the eyes—it's easier to navigate.

The newly revamped site, which launched last week, now includes two distinct portals: a public site geared toward prospective employees and an internal site built just for you. The public site can be viewed by anyone (whether part of the University community or not) to learn why Penn is such a great place to work. The internal site is where you can find all the resources you need to excel personally and professionally, like Penn's benefits, professional development resources, worklife balance programs, and more.

Ready to explore? Just visit www.hr.upenn.edu. To view the detailed information on the internal site, click on one of the links for faculty and staff, and log in with your PennKey and password. We welcome your feedback, so be sure to contact us at askhr@hr.upenn.edu with any comments or questions.

—Division of Human Resources

Penn's Way

A Workplace Charitable Campaign

Penn's Way 2013 Raffle Drawings

Week Six November 12 Drawing

(for week of November 5-9)

Bon Appétit at Penn Dining: Lunch for two (2 \$10 coupons)

Fork Restaurant: \$50 gift certificate

Morris Arboretum: Family membership

National Constitution Center: Two guest passes

Penn Ice Rink: Coupon book for 10 free admissions

Penne Restaurant & Wine Bar: \$75 gift certificate

Philadelphia Museum of Art: Two guest passes

See www.upenn.edu/pennsway for more info.

Week Four Winners

October 29 drawing (for week of October 22-26)
(mid-campaign prize drawing)

Bon Appétit at Penn Dining: Lunch for two (2 \$10 coupons)—Sinead Donnelly, Nursing

Penn Athletics: Two tickets to a Penn Basketball Game—Johnnie Latham, UPHS HUP

Penn Ice Rink: Coupon book for 10 free admissions—Wayne Riddle, UPHS HUP

Marriott Philadelphia Airport: One night weekend stay including breakfast*—Charner Steed, UPHS CCNJ

World Travel: Two coach class tickets on Delta Airlines for the continental US*—Emma Foley, Development & Alumni Relations (Penn Medicine)

*Note that prizes valued at over \$100 are subject to state and federal tax. Winners will be notified and offered the option of refusing the prize.

University of Pennsylvania Art Collection



Edward Steichen, Aboard the USS Lexington, 1943, by Victor Jorgensen. This will be exhibited within Gabriel Martinez's portion of the exhibition 9 Perspectives on a Photography Collection.

Photographs by Marguerite F. Miller



Honoring Those Who Served Our Nation

In 1952, Penn dedicated a flagpole—now at the west end of Shoemaker Green—with a statuary base and a surrounding bench as a war memorial. “The University of Pennsylvania—To Her Sons Who Died in the Service of Their Country, 1740-1952” is etched into the wall. The memorial, just north of Franklin Field on 33rd Street, was the first of many gifts of the late Walter H. Annenberg, W’31, H’66 (*Almanac* October 8, 2002). The dedication took place 60 years ago on a rainy Saturday in November, before the Penn-Army football game.

The war memorial, with its five oversized bronze figures—three male and two female—encircling a steel flag pole, has a huge black octagonal granite base and a limestone wall with the above inscription. The sculptor was Charles Rudy, a Guggenheim fellow (1904-1986) and the architect was Penn alumnus, Grant Simon, 1911, (1887-1967).

In 1998, on the occasion of its 55th re-union, the Class of 1943 funded the restoration of the memorial and rededicated it. A plaque was added: to honor “all from the University of Pennsylvania who served in our nation’s wars and to its classmate private first class Frederick C. Murphy, W’43, 65th infantry division, US Army, who gave his life in the line of duty at Saarlautern, Germany, March 18, 1945 and was awarded his country’s Medal of Honor for his unquenchable spirit of self-sacrifice and supreme devotion to duty.”

When Penn opened Shoemaker Green earlier this semester (*Almanac* September 25, 2012), a refurbished memorial awaited visitors, with rebuilt steps and wing wall, a repointed landing and new plantings and curbing to set it off from the walkway. It is now more visible and prominent.



Update

November AT PENN

FITNESS/LEARNING

14 WOCAP Noontime Network Lunch Series—Qigong; a self-care modality that incorporates breathing, meditation, movement and self-massage. The workshop, facilitated by Sandra Herman, will focus on why self-care is important for women; noon-2 p.m.; Graduate Student Center (AARC, Women of Color at Penn).

SPECIAL EVENT

12 Veterans Day Flag Raising Ceremony; presentation of Colors: 82nd Airborne Division Color Guard; Invocation: University Chaplain Charles Howard 8:30 a.m., College Green, Locust Walk; (Office of Affirmative Action; SEAS; VPUL: Veterans Upward Bound Program).

AT PENN Deadlines

The November AT PENN calendar is online at www.upenn.edu/almanac. The deadline for the weekly Update is each Monday for the following week’s issue. The deadline for the December AT PENN calendar is today, *Tuesday, November 6*.

CLASSIFIED—UNIVERSITY

RESEARCH

University of Pennsylvania. Volunteers for Research Study: **Women ages 55 to 80 years.** We are looking for healthy women who have osteopenia or osteoporosis (low bone density). Study involves 2 visits for testing, including: Bone density test (DXA or dual emission X-ray absorptiometry, MRI study (magnetic resonance imaging), Blood draw. Compensation will be provided. Contact: Helen Peachey, (215) 898-5664

For information call (215) 898-5274 or visit www.upenn.edu/almanac/faqs.html#ad
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The University of Pennsylvania Police Department Community Crime Report

About the Crime Report: Below are all Crimes Against Persons and Crimes Against Society from the campus report for **October 22-28, 2012**. Also reported were 20 Crimes Against Property (14 thefts, 1 burglary, 1 traffic offense and 4 other offenses). Full reports are available at: www.upenn.edu/almanac/volumes/v59/n11/creport.html. Prior weeks’ reports are also online. —Ed.

This summary is prepared by the Division of Public Safety and includes all criminal incidents reported and made known to the University Police Department between the dates of **October 22-28, 2012**. The University Police actively patrol from Market Street to Baltimore Avenue and from the Schuylkill River to 43rd Street in conjunction with the Philadelphia Police. In this effort to provide you with a thorough and accurate report on public safety concerns, we hope that your increased awareness will lessen the opportunity for crime. For any concerns or suggestions regarding this report, please call the Division of Public Safety at (215) 898-4482.

10/23/12	11:43 PM	4000 Locust St	Intoxicated male/Arrest
10/28/12	1:08 AM	3900 Walnut St	Intoxicated driver arrested
10/28/12	2:43 AM	215 S 39th St	Intoxicated male involved in disturbance/Arrest

18th District Report

Below are all Crimes Against Persons from the 18th District: 5 incidents with no arrests (all robberies) were reported between **October 22-28, 2012** by the 18th District covering the Schuylkill River to 49th Street & Market Street to Woodland Avenue.

10/22/12	12:00 AM	4800 blk of Hazel Ave	Robbery
10/24/12	2:23 AM	4600 blk of Walnut St	Robbery
10/25/12	2:34 PM	4636 Chestnut St	Robbery
10/25/12	7:10 PM	4800 blk of Larchwood Ave	Robbery
10/26/12	6:20 PM	4725 Chester Ave	Robbery

Building Road Maps to Close the Achievement Gap

If big-city school systems had a clear picture of the risks that put their African-American students in danger of falling behind academically, and of the protective factors that are helping some of those students overcome such dangers and succeed, educators and policy makers could build locally targeted solutions for addressing the achievement gap.

Researchers at Penn's Graduate School of Education (GSE) have found a way to create just such a road map by mining the kinds of data that schools and social service agencies already collect routinely. Their findings were reported in the October 2012 issue of the *Journal of School Psychology*.

In the study they describe in "Academic Achievement of African-American Boys: A City-wide, Community-based Investigation of Risk and Resilience," Penn GSE Professor John Fantuzzo and his co-authors used an integrated data system they helped develop to match thousands of third-grade boys from across Philadelphia, both black and white, with records stored by the schools and other agencies that had previously not shared data systematically, if at all.

Third-grade boys were chosen because third grade is the first time that children take state-mandated achievement tests. The data, which had been collected over the boys' lifetimes and even extended back before their births to the time of their mothers' pregnancies, allowed the researchers to use sophisticated analytic techniques to find the correlation between academic performance and various risks and protective factors over time.

The researchers found that the black-white achievement gap was accompanied by a "risk gap" of the same magnitude. African-American boys in Philadelphia were considerably more likely than their white counterparts to experience risks such as poverty, maltreatment, homelessness or lead exposure; to have a low birth weight; to have a mother with a low level of education; or to have a mother who received inadequate prenatal care. All of these risks were correlated with poor academic performance, and Dr. Fantuzzo calls them "what's behind being behind."

The researchers also studied the link between academic performance and the boys' school attendance and behavioral records. They found that African-American boys who showed higher levels of engagement through strong attendance records and frequent participation in classroom tasks did better academically than their peers who were less engaged.

The findings suggest that to close the achievement gap, schools and social service agencies must work together to reduce the risks to which African-American boys in their communities are exposed. But educators must also work with boys and their families, building home-school collaborations to help these boys stay engaged with learning. And this must happen early in the children's academic careers, the researchers say; many African-American boys show increasing signs of disengagement beginning in the youngest grades.

Dr. Fantuzzo's co-authors are Research Associate Whitney LeBoeuf of Penn GSE, Dr. Heather Rouse of the University of Arkansas for Medical Sciences and Dr. Chin-Chih Chen of the Virginia Commonwealth University School of Education.

Biomarkers in Blood May Detect Alzheimer's Disease

Efforts to develop a blood test for Alzheimer's disease are progressing, as a new study co-authored by experts from the Perelman School of Medicine has found a group of biomarkers that hold up in statistical analyses in three independent groups of patients. The study, a unique collaborative effort between researchers at Penn, Emory School of Medicine and Washington University as well as the Alzheimer's Disease Neuroimaging Initiative (ADNI), was recently published online in *Neurology*.

Previous efforts have focused on spinal fluid biomarkers and radiologic tests like MRIs and PET scans. These newer tests can detect various levels of proteins implicated in the Alzheimer's disease process, such as amyloid-beta and tau proteins.

In this study, researchers found that the levels or amounts of four different biomarkers detected in blood plasma were different in people with mild cognitive impairment or Alzheimer's, when compared to healthy controls. These protein biomarkers included: apolipoprotein E, B-type natriuretic peptide, C-reactive protein and pancreatic polypeptide.

Future research will seek to validate this large multi-center study to determine how informative these biomarkers may be in research settings and clinical practice, develop standard protocols for their use in research and clinical settings, and ensure that a blood test for Alzheimer's based on these new findings delivers accurate results consistently.

The study's lead author, Dr. William Hu, assistant professor of neurology at Emory University, began this research when he was a fellow at Penn. The research team from Penn included Drs. Leslie M. Shaw, Steven E. Arnold, Murray Grossman, the late Christopher M. Clark (*Almanac* January 24, 2012), Vivianna M. Van Deerlin, Leo McCluskey, Lauren Elman, Jason Karlawish, Alice Chen-Plotkin, Howard I. Hurtig, Andrew Siderowf, Virginia M.-Y. Lee and John Q. Trojanowski.

You Have to Eat Except When You're Not Hungry

When compared to their normal-weight siblings, overweight and obese children ate 34 percent more calories from snack foods even after eating a meal, reports a Penn Nursing researcher in *The American Journal of Clinical Nutrition*. That can be enough calories, if sustained over time, to continue excess weight gain.

In a study of 47 same-sex sibling pairs, the research showed that, even after eating a meal they enjoyed until they were full, overweight and obese children were more prone to overeating when presented with desirable snack foods than their normal-weight siblings.

The study also showed that normal-weight siblings ate less of the meal when provided with a calorie-dense appetizer just before the meal. In comparison, overweight and obese siblings did not lessen the amount they ate at the meal enough to offset the additional calories from the appetizer.

"The overweight and obese siblings showed an impaired ability to adjust for calorie differences and consumed more snacks even when satiated," said lead author Dr. Tanja Kral, an assistant professor at Penn Nursing. "These findings suggest some children are less responsive to their internal cues of hunger and fullness and will continue eating even when full."

This inability may be inherited and exacerbated by an environment that offers large portions of desirable foods, said Dr. Kral, explaining that the full siblings in the study were more similar in their eating behaviors than the half-siblings, suggesting a genetic influence underlying these traits.

In the study, siblings ate a standardized dinner of pasta with tomato sauce, broccoli, unsweetened applesauce, and two percent milk once a week for three weeks. When presented with desirable post-meal snack foods, the overweight and obese siblings ate an average of 93 calories more than their normal-weight siblings. This additional calorie intake over time is considered enough to lead to excess weight gain.

"Future studies should test whether teaching children to focus on internal satiety cues and structuring the home food environment in a healthy way may prevent at-risk children from overeating," Dr. Kral said.

Present Verb Tense Can Positively Affect Substance Abuse

The use of present versus the past tense in recalling an experience with binge drinking can positively influence behaviors, an important step in aiding the development of alcohol abuse messages.

That is the primary finding of a study by Dr. Dolores Albarracín, Martin Fishbein Chair of Communication at Penn's Annenberg School for Communication, and colleagues Pilar Carrera, Dolores Muñoz, Amparo Caballero and Itziar Fernández. Their findings are reported in the *Journal of Experimental Social Psychology* (Vol. 48, No. 5).

How an incident of binge drinking is recalled can have a positive impact on influencing future behavior. "It may be best to use the present tense when evoking images of non-drinking behaviors being promoted but the past tense for the drinking behaviors to prevent," said Dr. Albarracín. She added that use of the present tense in scenarios like self-help groups, may be particularly beneficial in preventing abuse.

Dr. Albarracín and her colleagues conducted three studies where participants wrote about their experiences in binge drinking using either the present or past tense. Experiment number one revealed a stronger influence of past behaviors on drinking intentions when the test participants wrote about an episode of excessive drinking using the present tense. Correspondingly, there was a stronger influence of attitudes supporting excessive drinking when participants wrote about the episode in the past tense. Experiments two and three found that the present tense recollections had a more concrete interpretation and impact, while past tense recollections were more abstract.

Participants in the study were, on average, 22 years old and were primarily female (123 out of a total of 153). All were psychology students from the Autónoma University of Madrid, Spain (The school that Drs. Carrera, Muñoz, and Caballero are from; Dr. Fernández is from the Universidad Nacional de Educación a Distancia, also in Spain) and were randomly assigned to each study. Participants were asked to write about their personal experiences with binge drinking (defined as five drinks in a row for males, four drinks in a row for females) using either the past or present tense. The team also evaluated the degree of difficulty participants experienced in writing about situations in the past or present tense and found that this did not impact their recollections.

"Recalling a past instance of binge drinking can lead to intentions to repeat what one habitually does or what seems beneficial depending on what verb tense is used. Reliving the past of drinking excessively in the present tense (I am drinking) makes people use their past behavior as a guide for future intentions: Regardless of whether people drank a lot or abstained in the past, they intend to do the same in the future. Recalling the past in the past tense (I drank), however, leads to more abstract types of thought and thus forming intentions on the basis of how good or bad drinking seems," explained Dr. Albarracín.