New deadline for IP form is Nov. 21

Beginning Nov. 21, faculty who have — or want to have — federal grants or contracts must have an intellectual property (IP) assignment agreement or IP acknowledgment on file with the Office of Technology Management.

In an Oct. 24 letter to faculty, Provost Patrick S. Beeson announced the deadline and reiterated the three options she outlined at Senate Council last month. (See Oct. 23 University Times.)

The first option allows faculty who signed the assignment agreement form circulated with Vice Provost Carey Balaban’s Aug. 4 memo to retain that agreement stand.

The second option is to sign a revised assignment agreement form that incorporates suggestions made by a task force convened by the provost after some faculty balked at signing the original agreement.

The University Senate tenure and academic freedom committee brought a motion to Faculty Senate in September in response to faculty who felt pressured to sign the initial IP agreements. (See Sept. 11 University Times.)

Beeson acceded to the Assembly’s request for more time and more information, delaying an initial Sept. 16 deadline and forming an ad hoc committee to air faculty concerns.

The third option is to sign an IP rights acknowledgment form in which faculty agree to abide by Pitt patent rights and technology transfer policy but delay assigning IP rights to the University until the time of invention.

Faculty who signed the initial agreement may opt to replace it with the revised IP agreement or the IP rights acknowledgment.

Beeson has called upon University deans to implement a process within their schools for collecting the signed assignment agreement or acknowledgment forms in time to meet the Nov. 21 deadline.

In her letter, she explained that federal agencies, as a condition of providing funding, require the University to have agreements in place with individual faculty to protect the government’s interest in IP developed with the support of federal grants and contracts.

She noted as well that founda-

Plenary session tackles big data

Faculty experts from across the University took on the timely topic of big data and its implications in the University Senate’s fall plenary session, “Managing Research Data: Challenges and Opportunities at the University.”

Liz Lyon, former associate director of the UK Digital Correlation Centre and now a visiting faculty member in the School of Information Sciences, presented the keynote at the Oct. 23 event, held at the William Pitt Union.

“This is not an easy thing to do, to manage the research data of an institution effectively,” said Liz Lyon, visiting professor in the School of Information Sciences and University Senate plenary session keynote, “Going up for Data’s Institutional Drivers, Challenges and Opportunities.”

“’We shouldn’t underestimate the explosion, the deluge, the tsunami... of data,” she said, citing the sheer scale among the reasons why research faculty should care about managing data.

Data can be lost, she said. In 2005 a fire destroyed the University of Southampton’s electronics and computer science departments. “A lot of optics and optoelectronics materials were lost, data was lost. PCs were lost, research was lost.”

Lyon’s laptop recently bounced off a conveyor in an airport security line. “Because it was in a case, it was okay and my data is in three different places, so it was okay. But accidents do happen. Laptops got lost on buses or taxis or in cafés, USB sticks got dropped in glasses of beer... You need to think quite heavily about where your data is.”

Reputations on the line

Concerning concerns about research quality and the implications for a researcher’s — or his or her department or institution’s — reputation are making news.

Lyon cited lessons to be learned from the troubles that ensued after other researchers couldn’t replicate cancer research results published by Asil Guck and colleagues from Duke University. Duke’s subsequent inquiry uncovered additional difficulties, leading to the article’s retraction from Nature Medicine.

She pointed to a “gold standard” for authors on the continuum of reproducibility promoted by John Hopkins bio-statistician Roger Peng. “You publish your code, your data, everything that allows the reproducibility of the claim that you’re making in your article,” she said.

Lyon called attention to The Science Exchange, which provides reproducibility as a service to universities. “You can get your data corroborated and checked by this service,” she said. The organization has received funding to take 50 of the most impactful cancer studies and rework them. “They’re going to go back to the data and rework those studies to make sure the results are truly valid.”

Managing research data in open form can facilitate partnerships and collaboration. An unusual agreement among academics and pharma companies to share data has produced results in advancing Alzheimer’s disease research, Lyon said.

Funding

Money is another issue. Many funding agencies are requiring data management plans or data sharing plans as part of the submission process, she said. “Data is squarely on their agenda too,” she said.

Institutions must pay attention as well. In the United Kingdom, government research councils have placed responsibility for data

CONTINUED ON PAGE 9
The value of midterm assessments

Professor Jones teaches a large lecture class that requires four equally weighted tests throughout the semester.

After the first exam, he was dismayed to discover that many students did not understand the basic information needed to build the foundation for more complex topics. He decided to use the first exam yielded surprisingly poor results.

Professor Jones decided that a midterm assessment was necessary in order to determine why students were not learning the content that he had prepared for each class.

Midterm assessments differ from the student evaluations of teaching administered by the Office of the Assistant to the Dean for Teaching Excellence (OETE) because they are designed to gather information about the teaching and learning process that instructors can apply immediately. Each instructor is asked to complete such a survey, but it is not a tool for universities, which have scholars rather than employees. Nevertheless, because universities will not submit grant proposals without signed forms.

First, a short history of the Great Academic IP Grab. The IPR was somewhat of an academic/granting case called Stanford v. Roche. A Stanford firm unilaterally signed a standard company form that gave away an invention. University administrators everywhere had a similar experience. IPR was a significant problem, but I am skeptical. Would you sign a company IP form? And they decided to solve the problem by grabbing all the IP from the get-go. If we scholars don’t own anything, then we can’t accidentally give anything away. Universities are grabbing IP by compelling their scholars to sign a legal instrument called a “Parent Assignment.” This instrument is often used by companies to ensure that they can make money from employees’ ideas. It is not a tool for universities, which have scholars rather than employees. Thus, the question is not whether universities will not submit grant proposals without signed forms. Great agencies have requirements, and as such, we are expected to be part of this current Great Academic IP Giveaway. The remarkable change, as I mentioned at the outset, is that the “grab” is now a “giveaway.”

Pitt joined the Great Academic IP Grab this past August. All faculty members were told that we had to sign assignments. We were told that these assignments were routine statements of University policy, standard forms needed to submit grant proposals. People who know what such assignments were (ownership? I suppose) would say that statements like these were untrue (see included). A lively discussion ensued because universities will not submit grant proposals without signed forms. Great agencies have requirements, and as such, we are expected to be part of this current Great Academic IP Giveaway. The remarkable change, as I mentioned at the outset, is that the “grab” is now a “giveaway.”

At the core, IP ownership is a complicated legal issue. What is IP? It is a idea and a muse. Who owns your idea? When does ownership change? Fortunately, you don’t need to have an expert in IP ownership to decide which folks to sign. The point is that you don’t need an expert in IP ownership to decide which folks to sign. You give it away (Options 1, 2) when you can keep it (Option 3). It’s a no-brainer.

The University has provided a summary of what you should do in re-signs Options 1 or 2. I do not find close to appealing. However, if you are seasonal or are signed under Options 1 or 2, then spend a few dollars to consult a lawyer. It costs much more to consult a lawyer than the simple forms to review (simple for your lawyer, that is). Ask your lawyer what your IP is and who owns what before and after signing the assignment. Ask what the consequences of ownership might be.

Adapting to a changing environment

The mission of the University Senate’s benefits and wellness committee includes advocating for benefits and wellness programs that prioritize cost-effective competitive benefit programs for faculty, staff, retirees and students.

Last year the committee focused on improving communication and creating greater awareness of the benefits and resources available to the University community. This was accomplished through several initiatives such as committee members keeping their fellow colleagues informed through outreach programs, such as school-based individual/group financial advising sessions with a TIAA-CREF representative. This session was held in the spring and fall and was the most popular session.

The committee also decided to poll their colleagues about benefit and health concerns. John Koza, vice chancellor, Human Resources, directed the committee to use the Biannual Health Needs Survey tool and conduct a focus group of every campus.

The committee has an interest in the health of its members and believes that this information is crucial to the continued success of the University.

The committee members are interested not only in the development of these stress management and mental health programs, but also in advancing established evidenced-based programs, continuing to advocate for health promotion, and identifying opportunities in health promotion offerings. The committee’s initiatives support the University health plans’ emphasis on prevention programs, such as tobacco cessation, health counseling, wellness events, nutrition counseling and the Fitness for Life program.

The benefits and wellness committee will continue to partner with Human Resources to find solutions for faculty, staff, retirees and students, providing updates as programs evolve. The collaborative effort between the committee and the Office of Human Resources ensures that the programs provided are key ingredients in a growing partnership with the University community.

Angeline A. Riccelli, a faculty member in the School of Dental Medicine, is chair of the Senate’s benefits and wellness committee.
Public safety building named in honor of Cochran

Pitt's public safety building will be named in honor of Executive Vice Chancellor Jerome Cochran, in recognition of his service to the University in a range of positions, including roles as assistant provost, director for Health Sciences, interim dean of the School of Pharmacy, director of the academic advancement and vice chancellor for business and finance, interim athletic director and special counsel.

The University's Board of Trustees approved the move at its Oct. 3 meeting. Commenting Cochran for his "breadth of knowledge and the ability to get things done," board chairperson Stephen T. Ritchie said, "Jerry has certainly been one of the emerging forces for progress and change at this institution during his time here."

"Jerry truly set the standard," said, "The Oakland and the regional campuses have been transformed and improved for the students, faculty, staff and our neighbors in those communities."

Last summer, they witnessed successful recruitment campaigns, which run true and deep, and his efficient management paved the way for those resources to be reimagined in Pitt's other missions of acade- mic success, research and community-specific, which I think is very important," Titch said.

As executive vice chancellor, Cochran has overseen the University's business units, including the Athletics, Facilities Man- agement, Human Resources and Public Safety and Emergency Management offices.

Under his direction, capital projects totaling nearly $3 billion have been undertaken, adding 3.6 million gross square feet of new space.

Seated Titch: "Jerome Cochran has earned the admiration, affec- tion and respect of all the Board of Trustees, the administration, alumni and the entire University community. His dedication, loyalty and devoted service. The naming of the Jerome Cochran Public Safety Building is presented as a symbol of gratitude and the high regard in which he is held by his many friends and colleagues at the University of Pittsburgh."

Cochran holds bachelor's degrees in political science and administration of justice from Indiana University of Pennsyl- vania. He began his career in 1972 at Pennsylvania University Hospital and later was recruited by Pitt's then-Chancellor Wesley Puyos to serve as the University's assistant vice chancellor for academic affairs. In 1989, Cochran received a juris Doctor degree from Pitt's law school.

He practiced law at Buchanan Ingersoll & Rooney in Pittsburgh until 1995, when he returned to the University at the invitation of then-Intra-Chancellor Mark A. Nordenberg.

In other business, Titch announced that the University's annual alumni conves- sations and the formal installation of Chancellor Patrick Gallagher are set for Feb. 28. The date, 2-802, is the 250th anniversary of the University's founding.

"New commonwealth trustee chair," Titch announced, "Diane Tom Corbett, will join the board at its Feb. 7 meeting. Pitt alumna, Frances is a chairwoman in the law firm Houston, Eyrigen and Co.

France, of Swinick, has launched three companies: Legal NetWorld, Ltd., the first legal inter- nals software firm in the world, Pro- eny Pennsylvania, PCN Network, a state real estate company that was sold to a private equity firm earlier this year, and Medallion Analytics Corp., which pro- vides data services to mortgage originators and settlement service companies.

He serves on the boards of directors for Global Tax Management, General Cable Corp., LaRoche College, Catalyst Connection and World Presidents' Organization.

"Thomas J. Ushur is elected trustee emeritus for life. Usher is non-executive chair of the board of Marathon Petroleum Corp. and is retired chief executive officer and chired non-executive chairman of the board of United States Steel Corp. He earned his bachelor's, master's and doctoral degrees from the Swanson School of Engineering.

During his 22-year tenure on the Pitt Board of Trustees, he also served as a member of the executive, athletics and health sciences committees; chaired the board's financial development and investment committees; served on the ad hoc committee on risk and compliance; and was a University director and member of the executive committees of the UPMC Board of Directors and the joint UPMC Presbyterian/Shadyside Hospital Board.

Usher chaired the "Discover a World of Possibilities" capital campaign, 1997-2007.

He joined the Swanson school's board of visitors in 1986 and became its chair in 1996, a position he held for 12 years. He continues to serve as a member of that board.

Usher received the Swanson school's Distinguished Alumnus Award and was named a Distinguished Alumnus of the University by Legacy Laureate. He is also the recipient of the University's 2,258th degree and the University and the Trustees' Medalion.

Usher and his wife, Susan, established the Usher Endowed Chair in Melanoma. They were inducted into the College of Learning Society in 2007.

---Kimberly K. Barlow

Pitt 42nd in U.S. News Global ranking

U.S. News has ranked the University 24th in its 2021 list of Best Global Universities. Pitt tied with the University of Hong Kong, with a score of 64.7.

Top overall was Harvard, with a score of 100, followed by the Massachusetts Institute of Technol- ogy, Stanford University, and Berkeley, Stanford, Oxford, Cambridge, Columbia, Institute of Technology, UCLA, University of Chicago and Columbia.

The rankings were based on 16 indicators, including reputation (12.5 percent); regional research reputation (12.5 percent), publications (12.5 percent), citation impact (10 percent); total citations (10 percent); number of highly cited papers (2.5 percent), percentage of highly cited papers (10 percent), international collaboration (10 percent), number of PhDs awarded (5 percent), and number of PhDs awarded per academic staff member (5 percent).

Compared to all 750 world universities considered for a rank, Pitt was 66th for global research, 65th in research reputation, 47th for research reputation, 24th for publications, 7th for citation impact, 36th for total citations, 25th for number of highly cited papers, 66th for percentage of highly cited papers, 45th for international collaboration, 57th for number of PhDs awarded and 352th for number of PhDs awarded per academic staff member.

The magazine’s first global rankings also placed individual University scientific subjects within the list of peers worldwide, putting Pitt programs in biology and biochemistry, 16th in clinical medicine, 7th in immunology, tied for 36th in microbiology, 60th in molecular biology and genetics, 23rd in neuroscience and behavior, 28th in pharmacology and toxicology, 64th in psychiatry/psychology and 206th in social sciences and public health.

All of these areas also were ranked on all 10 indicators; the breakdown is here: www.nwes.com/education/best-global-universities/university-of-pitts- burgh-212329.

Ranked institutions hail from 49 countries.

U.S. universities have been ranked annually in the magazine's annual benchmark exercise for the previous three decades.

Asha Miller, faculty member of the Department of Rehabilitation and Physical Therapy in the School of Health and Rehabilitation Sciences, won second place among walkers and handcyclists competing in the 2015 TCS New York City Marathon, held Nov. 2.

Her time of 2 hours, 7 minutes and 44 seconds—two minutes and 45 seconds behind the winner—was achieved on a course of 23.2 miles, shortened slightly due to the number of vehi- cles.

Miller is a part of a consistent two-decades-long tradition at Pitt for the woman to win the work in June, led by Teresa Kehoe, former director of intramurals and recreation services and president of Dynamic Paddlers. Also among the women competing were Jenny Ross, director of intramurals and recreation services and president of Dynamic Paddlers. Also among the women competing were Jenny Ross, director of intramurals and recreation services and president of Dynamic Paddlers.
**UNIVERSITY TIMES**

**IN ACCESS**

Keynote speaker issues plea to make research accessible

**“Don’t lock up your research,” urged successful open-access publisher and advocating Erin McKiernan in a keynote Open Access Week lecture sponsored by the University Libraries (ULS).**

Being successful and being open don’t have to conflict. Open-access publishing doesn’t hurt, and “in some cases it can help you raise your profile, raise your visibility and get your work out there,” she said.

“From a very young age we encourage students to share, but when students enter academia we do everything we can to discourage it,” said McKiernan in her Oct. 22 talk, “Culture Change in Academia Making Sharing the New Norm” at the University Club. Young researchers are taught to compete rather than collaborate, to hold close their data and research results prior to publication and to view open-access publications as suspect, aspiring instead to publish in high-impact-factor subscription journals such as Cell, Nature and Science, she said.

“These are tenets of a very unhealthy academic culture that needs changing,” said McKiernan, a professor at the University of Waterloo, Ontario.

Changing those priorities not only requires individual commitments to making one’s own work open, but action and interaction at the institutional, regional and national levels, said McKiernan, who sees firsthand the effects of cost barriers to accessing scholarly research as a researcher affiliated with the National Institute of Public Health of Mexico.

“In some cases an electronic subscription to a single journal can cost half or even the entire annual salary of an entry-level investigator,” she said. They have to choose between conducting research and educational programs or subscribing.”

McKiernan said.

Despite open-access mandates like one recently signed into law in Mexico, “Many, many academicians in the world still do not have access to the literature they need. More importantly, there is still many people in academia who still don’t understand this,” she said.

The problem extends beyond the laboratory, she said. “Citizens, taxpayers, even our doctors—all kinds of people who don’t work in a university setting still need access to the academic scientific literature and they’re still not getting it.”

**What can researchers do?**

“What can I do as an individual researcher to improve the situation?” McKiernan asked. “Very simply: I can support open access,” she said.

She has pledged not to edit, review or work for closed-access journals such as Cell, Nature and Science, and to publish only in open-access journals. She also has committed to removing her name from a paper if co-authors refuse to be open and to blog her work and post preprints whenever possible.

Some colleagues see her pledge as risky. “Even if there are some inherent risks involved in this position, I really feel that if I am going to ‘make it’ in science, however you define it, to have it be on terms I can live with,” she said. “Having seen the access problem firsthand on a daily basis, locking up my work is not something I would be able to live with as a researcher.”

**Career concerns**

McKiernan dispelled many of the most common career concerns that publishing in open-access journals represents one’s work to less-visibility, lower-impact factor journals and lower-quality peer review, closing the door to choose jobs, grants or tenure.

It’s important for early-career researchers to get their work out there and make a name for themselves. “Publishing open-access is precisely the way to do that,” she maintained. There are “a lot of studies coming out these days saying that if you publish openly either in an open-access journal or making a copy freely available on some type of website, you will get more citations.” That holds true for data as well, she said.

Open-access doesn’t always equal low-impact factor. “Don’t worship the impact factor,” she said, noting that where research is published has nothing to do with the scientific quality of the work. “There are a lot of options even if you need to be concerned about the impact factor,” McKiernan said. Open-access journals such as Cell Reports, Open Biology, Frontiers, the PLoS journals and BMC series journals have moderate-to-high impact factors. And Nature Communications is the first Nature-branded journal to go fully open-access.

**Preprint culture**

“Poor-quality peer review isn’t limited to open-access publications,” she said. “We need to look at ways of improving the peer-review process,” she said. It’s possible to make even the best papers more open and transparent while evaluating the peer-review process. “It’s across the board,” McKiernan said, noting that retraction rates are highest in high-impact-factor journals such as Nature and Science.

A recent “tirade” in which many open-access journals accepted a fake article submitted by scientist John Boahman, received lots of press, but the test wasn’t scientific, given that he didn’t submit the article to subscription journals as well, she said. Several reputable open-access publishers indeed rejected the article. “Their peer review was working just fine.”

In addition, some journals publish reviewers’ criticisms and the author’s subsequent changes along with the article. “I think the more we see open-access journals use the transparent peer review process, the more we’re going to be able to dispel that myth that it’s of poor quality,” she said.

Early-career researchers in particular worry they won’t be able to get a job, a grant or tenure without publishing in traditional journals. “I think there’s evidence that the tide is changing,” said McKiernan, citing the San Francisco Declaration on Reraction Assessment (DORA), launched by the American Society for Cell Biology. (http://am.ascb.org/)

More than 500 organizations and 12,000 individuals have signed DORA, pledging, in part, not to consider journal-based metrics such as impact factor in hiring, promotion or funding decisions, to weigh more heavily the content of a paper than the title of the journal in which it is published, and to consider the value and impact of all research outputs.

The University of North Texas has an open-access manifesto that extends open data as a standard part of its research. Researchers there and the Virginia Commonwealth University faculty senate in 2010 passed a statement that encourages promotion and tenure committees to recognize that open-access publications offer added value and greater public good. Both are indications that institutions increasingly value open-access, open-data efforts, she said.

“Funders for grants. ‘It’s going to soon be the case that you have to publish openly to get a grant’,” McKiernan said, citing open-access mandates by institutions including the National Institutes of Health, Howard Hughes Medical Institute and others.

“Funders care about open access and open data.”

Publishing in open-access journals may be cheaper for authors, McKiernan said. Many institutions have open-access publisher memberships that reduce costs for their authors, or open-access publish- funds to cover author fees. Many publications don’t charge authors, others, like Peer, use a one-time membership fee model that allows authors to publish one article per year, provided it passes peer review.

Publishers also may waive article processing charges. “The important thing is to talk to them. You can negotiate that APC,” she said.

If none of those options work, “Self-archiving costs zero dollars,” she said.

There are subject-related repositories such as arXiv or bioRxiv or institutional archives, such as d-scholarship@Pitt. Preprints can be posted to Peer. Figure shows authors allow one up one article per year to a repository. Publishing openly is a win-win, McKiernan said.

“What I think it means is more exposure for your work. Researchers in developing countries can see your work, practitioners can apply your findings,” she said. “Higher citation rates for you. Taxpayers get the value for the research that they’ve paid for.”

“I really see no downside here for both society and you as a researcher.”

McKiernan’s presentation slides are posted at http://figshare.com/articles/Culture_change_in_academia_Making_sharing_the_new_norm_1053008.

—Kimberly K. Barlow

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**Faculty panel share their views on open access**

In a discussion moderated by Brian Beaton, interim director of the Keck Center for Science and technology, and faculty member in the School of Information Sciences, a panel of Pitt faculty responded with their own perspectives on open-access issues.

Access to scholarly research isn’t the only issue, Beaton pointed out. “If there are some large infrastructure gaps needing to be addressed in committing our- selves to open-access principles,” he said. “Just because someone has access to something doesn’t mean they can really use that work.”

Beaton, who works with citizen groups and nonprofits that are trying to use scientific research and data, said, “Access to academic research does not necessarily mean understanding. Click counts and comprehension are not the same thing, downloads and deep understanding are not the same thing.”

As an example, he pointed to the British “Patients Participate!” project, a number of the public produced lay summaries of academic articles.

“As we discuss building out this open-access infrastructure, I think there’s a lot of work to be done in making work the intellectual to the broader publics,” he said. “I think there’s room at Pitt specifically to be doing this kind of work.”

University Honors College Assistant Dean Gordon Mitchell, professor of psychology and communication, revisited Cambridge mathematician Timothy Gowers’ 2012 “Understanding Knowledge” blog post (see March 6, 2012, University.

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**Open access panelists from left:** speaker Erin McKiernan, Wilfrid Laurier University, Watson, Ontario, and Pitt faculty members Brian Beaton, School of Information Sciences, sociology; Gordon Mitchell, communication and University Honors College, and Lara Putnam, history. 

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CONTINUED ON PAGE 5
Cornellians have shared their views on open access
CONTINUED FROM PAGE 7

TIMES AGAINST JOURNAL PUBLICES ELSEVIER

More than 14,000 individuals have pledged not to publish, edit or referee Elsevier journals in protest of its restrictive business practices. The movement succeeded in moving Elsevier to pull its support for the Research Works Act, which Mitchell said would gut the National Institutes of Health’s open-access policy.

The publisher still includes confidentiality clauses in its contracts, insists librarians’ librarians the purchasing of bundling journals in subscriptions, and “double-chips” by charging both for article processing and for downloading articles, Mitchell said.

Gowers has since turned his attention toward collecting information on how willing faculty would be to do without Elsevier’s publications. It’s a timely question at Pitt, given the search for a new ULS director, Mitchell said. “I think that in that context it’s important to realize that faculty and the library can work synergistically when it comes to things like negotiating those bundling fees,” he said.

For library negotiators to drive a hard bargain with the publisher, they would need to risk losing access to its products. For faculty, the question is: “How willing would you be for them to take on that risk?” Gathering that data could help library systems negotiate, Mitchell noted.

“Our Pitt representatives are very hamstrung when they go into these negotiations because Elsevier can pretty much dictate the terms,” Mitchell said. “We know that you’re not going to turn this contract down because your faculty would revolt and these would be the only way that you could live with that,” Mitchell said.

“This idea of the publisher/conglomerate is now expanding to include social media type applications like Mendeley,” which Elsevier purchased in 2013, Mitchell noted. “It serves to really highlight the importance of Open Access Week and remind us of ULS director Ruth Miller’s words back in 2012. . .” when he said about time faculty woke up and realized that their interests aren’t different from those of the librarians.

Lara Putnam, history department chair and a faculty member in Latin American and Caribbean history, said she is readily aware of access disparities, having begun her faculty career in Costa Rica. She added that colleagues elsewhere on occasion will ask her to access resources on their behalf.

Putnam labeled herself a “gazoo pig in a land of open access,” describing how she benefited from making her work available at an early stage. She learned that she could legitimately post some form of her scholarly work on a model or preprint server, for example, and then, at the appropriate stage, publish in a journal.

Sociology faculty member Jackie Smith, editor of the Journal of the World Systems Research, said the costs of publishing as open access journal aren’t very high. The journal, which basically draws from the work of the members of the Political Economy of the World-System section of the American Sociological Association (ASA), has been open access since its start in 1994.

“It’s possible to have a cost-effective supported journal where people are committed to this model of publishing,” she said, noting that students and scholars do much of the editorial work on a volunteer basis.

When I took on the editorship, I thought I was mostly going to be editing,” she said. “I’m finding that I’m spending probably half of my time being an advocate for open access.”

She said, “It’s important to do open-access publishing, to change the basic ideas of academics and open up, to make research easily accessible, and to really promote good scholarship.”

“The very work of academic research is immensely enhanced by open-access research,” she said, noting that he and the ASAs’s participation in the open-access movement has been important to the field.

“Our readers are primarily outside of the United States. Even though we are publishing research from a relatively small section of the field, our readers are coming from places where they don’t have access to a lot of journals. That’s really motivated some of my commitment to pushing this forward.”

—Kimberly K. Barlow

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The Howard Hanna Fund

The Howard Hanna Fund is a family endowed scholarship fund for students in the Katz Graduate School of Business and College of Business Administration.

Two endowed scholarship funds are being established to honor the achievements and contributions of Pitt alumni Howard and Freyvogel Hanna, Jr., founders of Howard Hanna Real Estate Services and the Howard Hanna Foundation.

Hanna and his wife, Ann Freyvogel Hanna, founded the company in 1951. It is now the fourth-largest real estate company in the U.S. with more than 6,000 employees in eight states.

After earning a bachelor’s degree in business administration at Pitt in 1949, Hanna served in the U.S. Army during World War II as an American liaison officer with the Indian Army. After the war, he returned to Pitt to earn his Master of Letters degree in 1949.

Howard R. Freyvogel, Howard, the founder of Howard Hanna Real Estate Services and the Howard Hanna Foundation.

The University of Pittsburgh has been named a corporate cog in my dad’s life, in the Hanna family, and in the real estate company that bears his name. His abilities allowed him to graduate from Pitt with both undergraduate and Master’s degrees in Business.

The Howard R. Freyvogel Scholarship Fund is a small repayment that future generations can secure the same grounding in leadership that our father received from the University of Pittsburgh.”

UPPER HAND<br>Fund<br>Advisory Board<br><br>UPPER HAND<br>Fund<br>Advisory Board
Ferrante trial in wife’s death continues

As the University Times went to press, the trial of Robert Ferrante was finishing its second week in the Allegheny County Court of Common Pleas, under Judge Jeffrey Manning.

Ferrante, formerly a faculty member in neurological surgery, is accused of killing his wife, Ammano Marie Klein, who was a faculty member in neurology. She collapsed in their house on April 17, 2013, and died three days later. Medical tests showed deadly cyanide levels in her body.

Beginning Oct. 23, prosecutor Lisa Pellegrini, an assistant district attorney, has tried to prove that Ferrante possessed the motive and means to undertake such a crime. Pellegrini and prosecution witnesses have testified to Klein’s unhappiness with her marriage and her unsuccessful attempts to have another child with the use of estrogen and other drugs to aid fertilization, as well as Ferrante’s jealousy of one of Klein’s colleagues.

Much of the prosecution’s case rests on records of Ferrante’s Google searches—his computer was used to make inquiries about cyanide use as early as four months before Klein’s death and again just before hospital officials learned about Klein’s test results — and on his rushed purchase of cyanide tests to Klein’s collapse.

Pellegrini made much of Ferrante’s request for an overnight order for potassium cyanide using a P-card rather than more usual channels for obtaining lab chemicals with gift funds.

Later, a portion of the cyanide was found to be missing from the bottle.

Defense attorney William Difidodero contested that Ferrante had used a P-card 20 times for research materials, including an overnight order for itching alcohol, and that cyanide was being considered for use in Ferrante’s research into atherosclerosis-like factors. (ALS), or Lou Gehrig’s disease. The defense attorney reportedly made a deal for a reduced charge of the purest cyanide, which Ferrante denied. He told the jury, “I was relative to have Ferrante not pleased with Klein, but he wasn’t using her to get his way.”

Difidodero also has noted that the cyanide incident initially came back with incorrect results — although both results were deadly cyanide levels — and that, while Ferrante refused an autopsy for his wife, he did allow his organs to be donated, and they are functioning well in other people today.

Testimony in the Ferrante trial continues.

—Marty Levine

Pitt gets military friendly designation

The University has been named a 2015 Military Friendly School, a designation by Victory Media that recognizes the top 15 percent of colleges, universities and trade schools in the nation that are working to ensure the success of veteran students in the classroom and after graduation.

Named separately to the list were the University’s Bradford, Greensburg and Johnstown campuses.

Pitt-Bradford and Pitt-Johnstown have made the list for six consecutive years; Pitt-Greensburg has been on the list for four consecutive years.

Victory Media is a Pittsburgh-based, military-focused services firm and the parent company of the publications GI Jobs, Military Spouse and VeteranCare. Its annual evaluation of post-9/11 GI Bill-funded American institutions assesses academic credibility, financial assistance for veterans, nonfinancial military support, percentage of veteran enrollment and veteran graduation rates, among other factors.

Cristina Ruggerio, associate dean of Pitt’s College of General Studies, which houses the Office of Veterans Services, said “Veterans Services is dedicated to its mission of helping our students in their transition from military to academic life by supporting their ongoing academic success and expanding their personal, professional, and social networks.”

Established in 2007, Pitt’s Office of Veterans Services serves more than 500 students across Pitt’s five campuses. It offers pre-admission counseling, military benefits and scholarship advising, free tutoring and academic success programs and career training assistance.

The full list of military friendly schools is at www.militaryfriendlyschools.com.

Former pharmacy prof sentenced

Former pharmacy faculty member Bill Dow, 52, pleaded no contest on Oct. 27 to 23 counts of bribery and forgery in possession for purchasing narcotics using research funding he had obtained while at the University.

He was ordered to pay $3,864 to Pitt in restitution, received a sentence of six years’ probation without verdict and will undergo drug and alcohol rehabilitation. He also must undergo periodic narcotics-use and mental-health evaluations. If his probation is completed successfully, his criminal record “all goes away,” Allegheny County Common Pleas Court Judge Randolf B. Todd told Day.

Four of the county had charged a possible sentence of five years in prison and $15,000 fines. Assistant District Attorney Alan Cahnman noted that Day bought the drugs “for his own personal use.” Day was arrested by Pitt Police in late summer 2013.

Day had appointments in the departments of pharmaceutical sciences, chemistry, environmental and occupational health and computational and systems biology and with the Clinical and Translational Science Institute. He was director of the Proteomics Core Lab for the Schools of the Health Sciences and of medicinal chemistry in the Drug Discovery Institute.

He resigned from Pitt on March 1. He told the judge he hoped to return to academia or pursue consulting work.

—Marty Levine

GO GREEN!

Sign up for UTDirect, the University Times electronic headline service, at www.utimes.pitt.edu.
**Flu Shot Reminder:**
Get your flu shot without leaving campus!

It’s not too late to get your flu shot on campus! The School of Pharmacy working with Falk Pharmacy is conducting flu shot clinics on the Oakland Campus. There are two scheduled clinics left this fall. Falk Pharmacy will continue clinics every Tuesday and Thursday from 9 a.m. to 3 p.m., through Thursday, November 20, 2014. After Thanksgiving, flu shots will be available during regular business hours Monday through Friday from 8 a.m. to 5 p.m.

In order to expedite the administration of your flu shot, you are asked to complete the “Intake and Consent” form that was mailed to you in advance and bring it with you to the flu shot clinic. If you do not bring the form with you, you will be asked to fill out a form before receiving your flu shot. Remember to bring your UPMC Health Plan identification card.

UPMC Health Plan members may also obtain a flu shot from a participating provider at no out-of-pocket cost. If plan members obtain a flu shot at a clinic or pharmacy that does not participate with UPMC Health Plan, then they will need to pay for the flu shot at the time of service and file a claim for reimbursement. Reimbursement forms can be downloaded from UPMC Health Plan’s website at www.upmchealthplan.com, under "Commonly Used Forms" at the bottom of the page. Within the past two weeks, UPMC Health Plan also sent a cover letter with the forms to the home address of all faculty and staff members.

Individuals who participate in the Partbner Advocate plan can receive $25 in HSA credits for obtaining a flu shot.

Obtaining the shot is convenient! Flu shots are covered by the University’s UPMC Health Insurance Plan at no out-of-pocket cost to you. You will only need to sign the consent form and present your University ID and your UPMC Health Plan membership card. Note that if you do not carry the University’s medical insurance, you can still obtain a flu shot on campus for a $25 out-of-pocket charge.

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**UPMC MyHealth Ready to Quit™**
Great American Smokeout

Tobacco use remains the leading preventable cause of death in the United States. It accounts for approximately 438,000 deaths — one out of every five — each year. Even though 70 percent of adult smokers say they would like to quit, one in 10 of these tobacco products is increasing in the United States for the first time in almost 40 years.

In honor of the Great American Smokeout on November 20, consider taking advantage of the FREE resources available to help you quit tobacco for good.

**UPMC MyHealth Tobacco Cessation Programs**
Check out www.upmchealthplan.com or call a health coach. You will learn more about the helpful and effective tobacco cessation programs available to you at no cost.

Completion of a tobacco cessation program, combined with the proper use of a tobacco cessation medication, is your best option. The combined approach can increase your odds of quitting up to six times over trying to tough it out on your own.

Effective now, as a result of the Affordable Care Act, most over-the-counter and generic tobacco cessation medicines are available at $0 copayment — that means there is no cost to you. This includes generic Zyban (Bupropion) and nicotine replacement therapies such as patches, gum, and lozenges.

Call 1-800-807-0753 to speak to a lifestyle health coach to make a plan that works for you. Health coaching is confidential and offered at no cost to you — Monday through Friday from 7 a.m. to 8 p.m.

Think you have all the answers when it comes to quitting? Take a short quiz and learn interesting facts about smoking and your health. Text "smokeout" to UPMCCHIP (876247) to start the quiz. The answers may surprise you!
Managing data: Faculty weigh in

A panel of faculty members from across the University responded to Lyon's keynote.

Michael J. Becich, chair of the medical school's Department of Biomedical Informatics, discussed the department's recent $11 million National Institutes of Health (NIH) award to lead a Big Data to Knowledge Center of Excellence. "It's only a starting point. It's just a grant," he said.

"The focus of that grant is really to make intelligent analysis of data greatly impactful to health care and science. It's not just about health care and it's not just about the science," he said.

"If I had to say what's the DNA of the success of this opportunity, it's to promote wholesale sharing of data, software, of processes that people put together, to attach hardware to very hard problems that face us as scientists."

"The beautiful part about this grant is it will provide an opportunity for us to dig deeply both within the University of Pittsburgh and in our region with Carnegie Mellon as a partner, to start training data scientists on the use of the tools we're going to produce. It's my role in the grant to reach out to the 11 other funded sites across the country and bring their tools to life in this environment for our scientists in the region."

Kelly Dornin-Koss, director of the Education and Compliance Office for Human Subject Research, commented on the compliance aspects of data sharing and touched upon Lyon's point that while there is peer review of publications, rarely is there peer review of data. "That's an area I think we need to develop here at the University," she said.

Not only does her office present seminars on good research practices, it monitors and audits data. "We see the small datasets and what they look like. And throughout the years we have seen how data are maintained through out the University. They're kept in a variety of different ways. Some that we would promote, others we wouldn't," said Dornin-Koss.

"What we would like to see is that research is collected in a systematic manner and that there are sophisticated data collection tools used," she said.

"Perhaps surprising in the digital age, she noted, data often are maintained in hard-copy rather than digital form. "One concern with that is, if we're working with investigators that are working as sponsors of an investigational new drug, there's a whole set of FDA regulations surrounding electronic records and signatures," she said.

"But Dornin-Koss noted that FDA regulations go further than those regulations for research supported by Health and Human Services. There are additional requirements for products such as drugs, devices and biologics," she said. "As an institute we have to start striving toward compliance with the set of regulations," she said.

"I think the one difference that's important to point out is that sponsors monitor the ongoing conduct of the study," she said.

"So, if it's a study sponsored by a pharmaceutical company, they will send somebody out every six-eight weeks to look to ensure that the protocol is being followed and that there is good data being collected." In contrast, only a few NIH institutes come to look at source data, she said.

Barbara Epstein, director of the Health Sciences Library System (HSLs), discussed what librarians bring to the table.

"The research librarian community in health sciences and general academia has been exploring how to meet the new needs of faculty and students and how to develop library-based research data services — and what services to offer and what we can realistically deliver," she said.

"There's also a new push in the curricula of information schools and library and information science programs on developing a new breed of librarians and enhancing the skills of the librarians that are there," she said, noting that big data creates a need for data librarians, research services managers and data curators.

Most academic libraries — including Pitt — "are still exploring the demand for services, the types of services to offer, and the professional skills that are needed," Epstein said.

"These kinds of new roles will require funding, training and management," she said. "There's still a lot of infrastructure that needs to be acquired," she cautioned.

"It was easy to secure data when it was on a USB key or a floppy disk using the old technology. Now we're talking about data that's going to be distributed, data that's coming from laboratories and data that's housed all over campus, stored locally and transferred centrally for analysis," said Epstein. "I think it's a really exciting time. I'm glad we'll all be part of that."

On data management topics such as conventions, file naming and general knowledge about what people want to know," Epstein said.

HSLs reference services traditionally have emphasized support for faculty research activities, she said, adding that HSLS has a data management working group. A survey it conducted last year showed "considerable lack of knowledge and a demand for education among faculty, post-docs, graduate students and other researchers about data management, about conventions, file naming and just general knowledge about what people want to know," Epstein said.

HSLs offers a workshop series on data management topics such as data management planning, data sharing and discovery and regulations on data management in collaboration with the Clinical and Translational Science Institute's responsible conduct of research training center.

The University Library System, which has a coordinator of digital scholarship services, offers some longer-term storage for certain data sets through the University's data repository, d-Scholarship@Pitt. ULS also provides consultation on such concerns as funding, publisher requirements, data sharing, data management planning, describing and citing data, locating appropriate disciplinary repositories and identifying sustainable formats for data.

J eg Graham, enterprise architect with Compuating Services and Systems Development (CSSD), resonated with Lyon's concern for where researchers' data are. "Between 10 and 20 years ago, a lot of people had data stored on a server under their desk within the department," where it wasn't being backed up and was at risk for loss.

Data now are stored centrally through CSSD's Network Operations Center. "We're right now just completing a $5 million upgrade to the center so we can quadruple the capacity for power and cooling," Graham said.

In addition to protecting against loss, better security protects the University's reputation. "You want to make sure that the collection of the data is valid, but you also want to make sure that the data stays secure and intact so that somebody doesn't hack into a server and actually change the data. That's probably one of my biggest fears, not really stealing the data ... but the changing or modification of that data," Graham said.

In addition, CSSD is looking into electronic lab notebooks in order to provide a centralized service "so that the data is centralized in one place and we can apply controls systematically," he said.

CSSD also received a National Science Foundation grant to increase the network capacity between campus and the data center and with the Pittsburgh Supercomputing Center, which "gives us access to a lot of the nationwide research networks," Graham said. It also will begin to overlay the campus with a framework for high-speed network connectivity, beginning with Old Engineering Hall. However, "There's still a lot of infrastructure that needs to be acquired," he cautioned.

"It was easy to secure data when it was on a USB key or a floppy disk using the old technology. Now we're talking about data that's going to be distributed, data that's coming from laboratories and data that's housed all over campus, stored locally and transferred centrally for analysis," said Epstein. "I think it's a really exciting time. I'm glad we'll all be part of that."

As humanists and social scientists go into the field, the value of our data does not always come from its massiveness or the sensor-based collection of data out in the world. It comes from the amount of human time it takes to read the historical record and draw out pieces of our past. It isn't perhaps exabytes of data, but it is hard-won data from the history of humanity that takes trained experts to go into the field and understand," she said.

"The value of that data is high because of its value as a human being, the same as scientific data. It may have the appearance of being something different, but honestly it is the same."

The humanities have fewer CONTINUED ON PAGE 9
CONTINUED FROM PAGE 1

Managing data: Faculty weigh in

CONTINUED FROM PAGE 8

Managers of data can think about how to manage access to it. It’s about intelligent access to data: We’re not just saying here it is, have it all. We think we have to be quite canny about it and how best to manage release of data,” she said, adding, “The final part of this life cycle is how we can facilitate others to reuse our data.”

New infrastructure, new services, new tools and platforms are needed, although the cost of creating data management infrastructure remains a grey area, she said.

But there are benefits: “If we have the right services and infrastructures, we will help you as researchers to do your research more effectively and more efficiently,” she said.

And infrastructure creates new jobs that require new skills. “There is a shortage of people who are savvy with data,” she said, adding that she hopes Pitt’s iSchool can generate graduates who can fill those skills gaps.

Champions needed

Open-data culture must be challenged, she said. “To me this is the biggest challenge of all, because you don’t change culture overnight, and how we can get credit for our data and how that can be built into career development,” she said.

Noting that studies have shown a citation advantage from open data, she added, “There are now tools to track and monitor who’s using your data, who’s citing your data, who’s reusing your data. We can start to realize the ability to be able to include this information in our CV and submit it to a tenure committee.”

“Forme, if we have our CV and we have our publications and our other outputs, perhaps we should be thinking about putting our data in there. Our datasets that we’ve used and reused, our software, electronic lab notebooks.”

The institution can beneﬁt too. “We live in a world of rankings, many of which reference research activity. ‘Maybe in the future, the formulas for how they develop those rankings, might be research data and data outputs,” she said.

—Kimberly K. Barlow

Chancellor addresses Pitt’s role

cannot think of a better topic to bring us all together. It’s not from the perspective of the University of Pittsburgh, how do we respond to the question of what are we doing right now that is happening and how do we position ourselves?” said Chancellor Patrick Gallagher, who is chairing remarks at the University Senate fall plenary to tackle the theme “Research Data: Challenges and Opportunities at the University. “I could not be more proud of being a department that’s steeped in data,” Gallagher said, acknowledging that his views on research data management are influenced by his 21 years at the National Institute of Standards and Technology (NIST), and as acting deputy secretary of the Department of Commerce.

Many of the questions that I think are in front of Pitt right now is very much in our mind as well,” said Gallagher in outlining some of those issues and their implications for Pitt.

“Not so much that computation is new... but that we are now at a time when the scale is rewriting all the rules... The reality is that massive... it’s massive and it’s continuing to grow exponentially,” Gallagher said.

The Internet now creates more than 2.5 exabytes (10^18 bytes) of data a day. “Every two hours we generate as much information on the Internet as existed in the entire printed record of the world,” he said. “Ninety percent of all the information that exists is just two years old, and that’s going to be true two years from now because it’s going to double again.”

Connected devices now number humans by a factor of 2.5. “And the number is doubling every two years,” while the number of smartphones has reached 1.75 billion, one for every four human beings on the planet.

Social media now is the primary generator of big data, once the world in which we live, our physics and astronomy research and large-scale government business has all been transformed, which means that the humanities now have as big or large data streams as anybody needed.”

“The use, availability and risks associated with these streams of information are massive and with us, even though we don’t understand these consequences very well.”

“What is both a data and a communication infrastructure is connecting in ways that we have not yet fully adapted to,” he said.

Norms across personal, institutional and governmental boundaries have been thrown into flux, as have expectations for what should be open and what shouldn’t, and on what data is kept, where and by whom.

The chancellor said issues of custodianship and responsibility, questions of jurisdiction and standards for openness and data sharing remain to be resolved.

Data quality is a concern: As we gather data, it is good data? What about malicious spoofing or manipulation of data? What are the implications for human subjects research? And how do we address the geopolitical conflicts that arise through these struggles over data privacy?

“I think the real challenge is not how you position ourselves for what is happening today, but in a time when it’s changing logarithmically... How do we position ourselves to stay at the forefront of these issues?”

“What does it mean for our research efforts, which will be so enabled by our ability to work with and manage and use this data? How do we position ourselves to have that capability, to enjoy all the developments that are happening here and yet at the same time manage the very real threats and vulnerabilities that will arise from that as well?”

“What is our business model for sustaining this? How do we evaluate our investments in one-time infusions of capital to episodically refresh, we are already going to be behind. This is one when you really have to bake it into how we operate in a fundamental way so that we’re constantly refreshing and staying up.

“It almost certainly means we’re not going to be an island unto ourselves. The scale alone says that we are going to be as interconnected as anyone else in this business.

“What are our responsibilities in participating in that incredibly interconnected environment? How do we protect our interests and our information and yet how do we share and enable it and do things with it at the same time?”

Gallagher said.

“I think that it’s one of the most important challenges facing the University, but I also think it’s one of our biggest opportunities,” the chancellor said.

“I think the areas where Pitt has been so strong and so capable are one that are going to be most enabled by the technology revo- lution in front of us, so I’m also incredibly excited.”

—Kimberly K. Barlow
Collaborations like those that led to Jonas Salk’s achievements will be crucial if the world is to progress amid challenges of unprecedented magnitude, said economist Jeffrey Sachs in his keynote address at a daylong symposium marking the 100th anniversary of Jonas Salk’s birth.

"Sustainable development is the holistic integration of economic, social and environmental objectives,” an approach of scientific analysis, of governance, of problem solving and of human action that “does not work alone — it is a field of human action,” said Sachs, director of The Earth Institute and professor of health policy and management at Columbia University.

Sponsored by the Graduate School of Public Health, the Office of the Provost and the Jonas Salk Centenary Symposium, the event was held on Oct. 28 to celebrate the polo vaccine pioneer’s commitment to sustainability and examined connections between sustainability and health.

Sustainable development differs from sustainability — which refers mainly to environmental concerns — in that it requires a holistic vision to integrate human development and environmental sustainability, Sachs said, arguing the need for both an analytical holism — to see the intricacies and interconnections among systemic issues of economics, politics and nature — and a moral holism of goals.

"We need an integrated vision even to understand the kind of world we're in, and we're also going to need an integrated vision if we are going to choose moral directions we need to move," he said.

Growth is more than concern for the bottom line. "If we pursue economics to the point of mass social inequality and exclusion or if we pursue economics to the point of environmental destruction, we're going to end up with nothing of lasting value," he said.

The world is at an inflection point, Sachs said. The world is on an S-curve where the trajectory changes direction, said Sachs, contending that "as scientific knowledge, technology and diplomatic opportunity present a unique opportunity to our time."

"If we don’t get this right, I don’t know if there’s another way back soon enough to avoid calamity."

The possibility of success is likewise real. "We truly do hold in our mortal hands the ability to end all forms of human poverty. That is not simply great rhetoric... It is also a literal reality," he said.

"Our scientific age is an age of stunning capacity."

While the Salk team took three years to develop, there were three basic strains of polio virus, today’s genomically sequenced would shorten that task to mere hours or days. Billion-fold improvements in integrated circuitry make possible the transmission of data to the most remote parts of the world.

Other successes have come in global health. In line with the UN’s millennium development goal of cutting extreme poverty, the number of people who live on less than $1.25 per person per day has declined from 43 percent in 1990 to 21 percent in 2010, and is expected to fall to 16-17 percent by the next year, he said. Mortality rates for children under 5 have declined from 12.5 million in 1990 to 6.5 million this past year. Malnutrition deaths are declining.

"Our science of progress that are absolutely real."

However, "reality forces us to watch both sides of the ledger,” he said, cautioning that the social aspect of sustainability is under increasing stress. "More exclusion, more inequality, more perversion in the inequality of power, as well as the inequality of wealth and income," he said.

The world’s population, on pace to reach 11 billion by 2060, human strain on resources, and our impact on the world’s climate are unprecedented problems for this generation, he said. "We’ve never faced the intellectual pressure before," he said. "We recognize problems of inequality, of exclusion. We know problems of climate, we know about our complex human nature, but we do not understand the human impact on the physical world as it exists today, because that has never existed in this way before," Sachs said. "We are so numerous, we are so productive, that we can see the very basic substrate on which we grow. That’s the overshoot and collapse that a very real possibility."

To face such unprecedented challenges requires sustainable development. "We need fundamental technological transformations for safe energy systems, health care, the environment and social services provision. We need community protection of natural resources and the ability to build a global scale. We need strengthened local governance. We need better-shared technologies and resources. We need to restrain arbitrary corporate power. We need more computer, the Internet, the Mars rover and the human genome project. "That's what we can do when we try," he said.

Sachs directed such change "is exactly the story of the polio vaccine."

"Jonas Salk didn’t stumble on it. He aimed for it. And he had the political and social effort to aim for it, with the science community aiming for it and working with the March of Dimes, a national philanthropic effort aiming for it, and with government leadership to help bring it about."

The spirit needed to face sustainable development is the same spirit embodied in John F. Kennedy’s famous speech in 1962, after he had declared that the United States would send a man to the moon and return him safely before the end of the decade: “We choose to go to the moon. We choose to go to the moon in this decade and do the things, not because they are easy, but because they are hard, because thatgoal will serve to organize and measure the best of our energies and skills, because that challenge is one that we accept, one we are unwilling to postpone, and one which we intend to win, the blue planet for all mankind.”

"That’s the spirit that we need to face sustainable development," Sachs said, using Kennedy’s words of wisdom: "We need to learn to become wise and good stewards of the earth for future generations... We have enough time if we do not waste it."
RESEARCH NOTES

New catalytic modeling method uses biomass

A new method to model catalytic reactions and impound production of chemicals and polymers developed by researchers at the Swanson School of Engineering was the cover article in the November issue of Catalysis Science & Technology published by the Royal Society of Chemistry.

"Structure-activity relationships on metal-oxide: alkali dehydrogenation" was led by principal investigator Giannis Mporoumpakis, faculty member in chemical and petroleum engineering. Co-authors were a faculty member from the University of Pennsylvania and two student researchers.

Said Mporoumpakis: "Alcohol dehydrogenation catalysts are important in the production of valuable chemicals that are widely used in industry. Even though the dehydrogenation reactions have been researched heavily for more than half a century, the catalytic mechanisms are not well understood. If we can find a better way to model these catalytic reactions on a computer, we can reduce the amount of trial-and-error in the lab and therefore improve the production process."

Mporoumpakis developed the computer model, then dehydrogenation experiments verified the results. This model will allow researchers to easily test a variety of different alkalis and metal-oxide catalysts according to their dehydrogenation activity. Preparation and operating conditions greatly affect catalytic reactions, and this understanding and controlling how catalysts behave can improve the overall process and allow for more sustainable production methods. For example, the proposed catalytic modeling would enable the use of alcohol compounds derived from biomass, or plant-based materials, to produce cellulosic such as ethylene and propylene, which are the building blocks of polymers and plastics.

Public health works with state to create exercise program

The Graduate School of Public Health in collaboration with the Pennsylvania Department of Health to increase physical activity in Pennsylvania.

Public health will receive $1 million to increase active transportation — such as walking, jogging or bicycling — in communities served by several target school districts. The four-year WalkWoks initiative will build on previous efforts and complement school-based activities to address childhood obesity.

Said Linda Doschek, project leader and associate director of Pitt's Center for Public Health Practice: "There are so many benefits to walking, from improving one's physical and mental health to reducing traffic congestion and pollution. It's important that communities consider pedestrian transportation as a crucial component of transportation and infrastructure planning."

The communities to be served in the first year are the school districts of Purchase Line, Indiana County; Kanawha Area in McKean County; Allegheny Area in Blair County and Altoona Area in Cameron County. Additionally, a walking event will be established within the Capitol complex in Harrisburg.

By involving community-based partners from multiple sectors, such as health care providers, social services agencies and local governments, Doschek's team will identify, map and mark safe and accessible walking routes and establish and promote local walking groups.

As part of WalkWoks, the Center for Sustainable Transportation Infrastructure in the Swanson school will conduct walkability assessments in the target communities to identify strengths, opportunities and solutions related to pedestrian transportation.

Public health and the Swanson school also will provide technical assistance to their community-based partners and transportation planners to promote infrastructure planning and design, implementation and maintenance policies to create roadways that safely accommodate all users, including pedestrians, bicyclists, transit riders and motorists.

The goal is to influence local and regional planning efforts so that pedestrian facilities are considered and enhancements are made to the existing transportation network," said Doschek, a behavioral and community health sciences faculty member. "We want to make it easier for people to enjoy walking in their communities. The associated health benefits will follow.

For more information about WalkWoks, visit www.pawalkwoks.com.

$3.4 million funds training center for public health workforce

The public health school will receive nearly $3.4 million from the federal government over the next four years to establish and operate a training center intended to improve the nation's public health system.

Margaret Potter, principal investigator and faculty member in health policy and management, will oversee the establishment of the Region 3 Public Health Training Center.

The Department of Health and Human Services' Health Resources and Services Administration (HRSA) grant will create the new center to serve Pennsylvania, Delaware, Maryland, Virginia, West Virginia and the District of Columbia. It also will be the U.S. health informatics training center.

It will provide free training sessions to public health professionals in a variety of topics, ranging from behavioral health programming for smoking cessation to computer programs that track an infectious disease spread and simulation exercises to stop it.

The public health school has been the Public Health Training Center for Pennsylvania for the past 14 years. In the new regionalization of the HRSA training centers, public health will oversee local training sites can by Drexel University School of Public Health for eastern Pennsylvania; Johns Hopkins Bloomberg School of Public Health for Delaware, Maryland and the District of Columbia; the Virginia Department of Health for Virginia, and West Virginia University School of Public Health for West Virginia.

Said Potter: "Monitoring for air and water pollution, inspecting restaurant for food safety, containing infections disease outbreaks — these are all examples of the crucial work done by people who serve in our public health sector. In order for public health professionals to keep up with the latest technical developments in their fields, they need formal continuing education programs. That's what the training centers provide."

The Region 3 Public Health Training Center will run sessions in health informatics nationwide. The school's Public Health Dynamics Laboratory has developed programs including Project Triple, the framework for Reconstructing Epidemiological Dynamics and the Legal Network Analyzer, which can assist public health professionals in making decisions based on real-world data.

"Local public health department collect a treasure trove of information that helps them make informed decisions, and we want to make sure those tools continue to be used," Potter said.

CONTINUED ON PAGE 12
RESEARCH NOTES
CONTINUED FROM PAGE 11
data," noted Potter. "However, they often don't have the time, personnel or resources to turn that data into useful information that will inform their work. What we'll be able to do is give them the tools and the training to do their own analyses quickly and efficiently."
For example, knowing how to use certain data analysis programs, such as the ones developed by public health, during a disease outbreak could help a public health department make decisions on how to allocate its budget, what expertise it might need to bring in to manage the outbreak and what laws or policies might support or constrain the response.
Air toxics, childhood autism linked
Children with autism spectrum disorder (ASD) were more likely to have been exposed to higher levels of certain air toxics during their mothers' pregnancies and the first two years of life, compared to children without the condition, according to the preliminary findings of a public health investigation of children in southwestern Pennsylvania.
This research, funded by the Heinzel Endowments, was presented at the American Association for Aerosol Research annual meeting.
"Autism spectrum disorders are a major public health problem, and their prevalence has increased dramatically. Despite its obvious social impact, the causes of autism are poorly understood. Very few studies of autism have included environmental exposures while taking into account other personal and behavioral risk factors," one of the authors quoted in an earlier article said.
One of the strengths of the study was the ability to "use two types of controls, which provided a comparison of representative air toxics in neighborhoods of both children with and without ASD," said Talbott.
For each family, the team used the National Air Toxics Assessment (NATA) to estimate the exposure to 30 pollutants known to cause adverse developmental outcomes and environmental justice issues. NATA is the Environmental Protection Agency's ongoing comprehensive evaluation of air toxics in the U.S., most recently conducted in 2005.
Based on the child's exposure to concentrations of air toxics during the mother's pregnancy and the first two years of life, the researchers noted that children who fell into higher exposure groups to styrene and endosulfan (which is one of the four criteria for the risk of ASD) after accounting for the age of the mother, maternal cigarette smoking, race and education. Other NATA compounds associated with increased risk included dichlorodiphenyltrichloroethane, chloroprene, ethylene oxide, methanol and naphthalene. As these compounds are often found in industrial facilities, further study is needed.
"The results add to the growing body of evidence linking environmental and developmental issues, NATA is the Environmental Protection Agency's (EPA) ongoing comprehensive evaluation of air toxics in the U.S., most recently conducted in 2005. While previous studies have shown the increase to be partially due to changes in diagnostic practices and greater public awareness of autism, this does not fully explain the increased prevalence. Both genetic and environmental factors are believed to be partially responsible."
Talbott and colleagues interviewed 217 families of children with ASD and compared these findings with information from two separate sets of comparison families of children without ASD, born within Allegheny, Armstrong, Beaver, Butler, Washington and Westmoreland counties between 2005 and 2009.
DOE grant aids nuclear power safety research
Researchers at the Swanson School were awarded a $987,000 grant from the Department of Energy's Nuclear Energy University Programs (NEUP) to develop a three-dimensional, multi-scale model to improve safety and operational efficiency for nuclear power reactors and fast cycle systems. The grant was awarded under NEUP's nuclear energy enabling technology program.
"The principal investigator is the University of Pittsburgh Environmental and Occupational Health Office of Measurement and Evaluation of Teaching
The teaching survey period is fast approaching.
Survey Links are sent to students via e-mail and appear on their CourseWeb/Blackboard landing page on November 17.
The deadline for them to respond is December 7.
During the survey period:
• Ask students to complete the survey
• Allow time in class for students to complete surveys on their laptop, tablet, or computer
For more information or call us at 412-624-6440 with questions.

UNIVERSITY TIMES
POSTDOCTORAL FELLOW POSITION
A postdoctoral position is available immediately in Dr. Koldaonc's laboratory, at the Department of Environmental and Occupational Health at the University of Pittsburgh. We seek a motivated and enthusiastic Ph.D., or M.D., candidate with a proven track record in neuroscience or a related discipline. Our laboratory focuses on the involvement of glial cells in neurodegenerative diseases and mechanisms of neurodegeneration, specifically Alzheimer's disease. We are currently exploring the potential of LXR and RXR agonists to ameliorate disease progression and investigating environmental factors which impact Alzheimer's disease progression.
The ideal candidate will have experience with transgenic mice, animal behavior paradigms, small rodent surgery, histology, and microscopy. Experience in Alzheimer's disease or a related neurodegenerative disorder is a plus. The candidate will work with measurements of chloroethyl metabolites, and traumatic brain injury models although this is not essential, is highly desired. Responsibilities include planning, executing, and analyzing data, writing manuscripts, and preparing grant proposals, or other program statistical packages for data analysis is required. The candidate selected will be expected to work and publish their data in top-tier journals or present at national meetings.
Contact: Liudmila Koldaonc by e-mail: koldao@pitt.edu
University of Pittsburgh is an equal opportunity/affirmative action employer.
Magee-Womens to offer new surgery to treat lymphedema

Magee-Womens Hospital of UPMC is the only hospital in the region to offer new surgical techniques to cancer patients who develop lymphedema, an often debilitating and painful condition in which excess fluid collects in tissues and causes swelling.

UPMC estimated 30 percent of cancer patients who undergo surgery or radiation will develop lymphedema, which typically occurs in the arm or leg when lymph nodes have been surgically removed, or from damage to the lymphatic system caused by radiation therapy. Conventional treatments include massage, physical therapy or a therapeutic compression sleeve, but for many patients these options don't provide significant relief.

Said Carolyn De La Cruz, faculty member in surgery in the School of Medicine and a plastic surgeon at Magee: "Those who develop lymphedema as a complication are left with a chronic, life-long debilitating disease that has no cure and has a significant impact on their quality of life."

Magee surgeons have started performing lymphaticovenular bypass, a microscopic surgery that involves several tiny incisions in the arm or leg. Using specialized microscopic tools, surgeons redirect the lymphatic fluid to drain through small veins, alleviating a significant cause of swelling.

"Those of us who treat lymphedema know it's a chronic, lifelong challenge," said De La Cruz. "This surgery allows us to redirect fluid by taking an alternate route, bypassing the blockage."

Depending on the severity of the lymphedema, Magee surgeons may offer a new approach, lymph-node transfer, which involves removing lymph nodes from elsewhere in the body and transplanting them to the area of the body damaged by cancer treatment. After the procedure, the transplanted lymph nodes start to drain.

Said Atilla Soran, surgery faculty member and director of Magee's lymphedema program: "Until recently, surgical options for lymphedema haven't been effective. While traditional treatments work for a while, eventually a patient's insurance runs out and they begin developing complications, the cellulitis which need to be managed. The opportunity to offer surgical techniques significantly improves the complications from lymphedema can greatly improve patients' quality of life."

Both the bypass procedure and the lymph-node transfer are most successful in patients who are cancer-free, with early-stage lymphedema.

For patients with advanced lymphedema, a surgical debulking procedure in which doctors remove excess fluid from the fatty tissue of the affected limb can be a successful alternative treatment, although patients may still require compression garments and physical therapy post-surgery.

V Foundation gives $800,000 for study of head/neck cancer

Researchers from the University of Pittsburgh Cancer Institute (UPCI), partners with UPMC CancerCenter, have been awarded a grant from the V Foundation for Cancer Research to study gene mutations in patients whose head and neck cancer was caused by human papillomavirus (HPV) in hopes of finding a more effective, less toxic therapy for this often painful, disfiguring disease.

The three-year, $600,000 grant was awarded to principal investigator, Julie Bauman, faculty member in medicine and director of the Head and Neck Cancer Section in the Division of Hematology-Oncology at the School of Medicine. Bauman is also co-director of the UPMC Head and Neck Cancer Center of Excellence.

The V Foundation, formed by ESPN and former college basketball coach Jimmy Valvano, also recognized Pitt's Kuan Bernstein with a V Scholar award, worth $200,000 over two years.

The grant will help researchers build on existing scientific knowledge and pioneer new treatments for head and neck cancer, which affects more than 50,000 people in the U.S. and 600,000 people worldwide each year.

Oral infection with HPV is becoming the primary cause of head and neck cancer in North America and Europe. Although HPV-related cancer responds well to aggressive chemotherapy and radiation, progression of surgery, radiation and chemotherapy can result in permanent changes to uniquely human functions: facial expression, speech and swallowing.

Said Bauman: "We've already learned that half of HPV-related head and neck cancers demonstrate state abnormalities in a gene known as PIK3CA. We're now learning how alterations in this gene cooperate with the virus to transfer benign HPV infections into cancer. In addition, we are conducting a clinical trial to see whether a new drug that targets PIK3CA improves response in patients with HPV-related cancers. Ultimately, we aim to identify more-effective and less toxic treatments and even to prevent the transformation of HPV infection into cancer."

Bauman is collaborating on the study with Jennifer Grandis, vice chair for research, otolaryngology and pharmacology faculty member and program leader for UPCI's head and neck cancer program; Simion Chiosea of pathology; Uma Duvvuri of the lymphatic system, and faculty from the University of New Mexico.

—Compiled by Terry Levine

GSPIA offers nonprofit counseling

Nonprofit organizations in need of management consulting assistance on topics related to management and governance are invited to apply for free counseling in the spring term through the Graduate School of Public and International Affairs' (GSPIA) nonprofit clinic.

Under the guidance of Kevin Kraus, second-year GSPIA student in the capstone seminar will provide consulting on topics such as strategic planning, business planning, market analysis, program evaluation, human resource management, financial analysis, board governance, and board development and fiscal development.

To apply, contact Kraus at ksk9@pitt.edu.

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LOFTS OF MT WASHINGTON

PittLaw
Thursday 13

HSLS Workshop
"EndNote Basics," Linda Hartman, Folk Library class; 2, 11 am-noon (thsandr@uiuc.edu / workshops)

Molecular Biophysics/Structural Biology Seminar
Nathan Tien, 4011 BT3A, 11 am

TISS Workshop
UPN/Ath/adv/hou/fem/mexec/ncf/ctz/ctz/15/11/sands4 (jagowrk@uiuc.edu)

History & Philosophy of Science/Philological Science Lecture
"The Revolution in Molecular Biology," Philip Sharp, MIT; 5 pm, 1203 Searle Hall

CIDEDE TA Workshop
"Dealing With Difficult Situations in the Classroom," G4 Hilleman, 10:30 am (see (riddle.piidel@uiuc.edu / workshops)

Biochemistry Seminar
Nathan Tien; 4011 BT3A, 11 am

Friday 14

Hispanic Languages & Literatures/Languages Seminar
"Pink Tide: Its Achievements, Its Failures, Its Legacy & the Eventing Categorias," 5:30-9:40 am (see (riddle.piidel@uiuc.edu / workshops)

CIDEDE Workshop
"Teaching Portfolio," 815 Alumni, 10 am (see (cidepe@uiuc.edu / workshops)

Molecular Biology Talk
"CRISPR: A Novel, Powerful, Easy-to-use Genome Editing Tool," Anthony Boy, Folk Library class; 2, 10:30 am (see (riddle.piidel@uiuc.edu / workshops)

Women's Basketball vs. Princeton, 7 pm

Saturday 15

Czech Film Screening
"The Magikal Voice of a Redfa Mafa Kudzov!" 7 pm (see (riddle.piidel@uiuc.edu / workshops)

Sunday 16

Men's Basketball vs. Stanford, 6 pm

Heinz Chapel Concert Organ recital; UPU students: Heinz Chapel, 5 pm

Johnstown Concert "Rome & Reuters," Beildelshond, 7 pm

Tuesday 18

Fellows Educational Conf.
"Ecology #2: GI Breeding," Keith Mclnair, Prentis 302 conf., 7 pm (see (jackson.piidel@uiuc.edu / workshops)

Bradford Campus Seminar "Management: Don’t Make ‘Em Do It,” Joyce Whelan, Pediatric Conf., 7 pm (see (jackson.piidel@uiuc.edu / workshops)

HMS Seminar "Personalized Medicine,” 8 pm, 294 Hilleman, 7 pm (see (amman.piidel@uiuc.edu / workshops)

Thursday 20

Defense
"Effective Resource Allocation in a Biveted Heresy With Knapack & Assignment Level Protocols," Tedand Beldel, Shool, Nov; 6, 1200 Ueno, 9 am

"New Insight Into How VTA Neurons Encode Information About Social Attraction," Jane Wood, Nov; 6, LDRD 307, 11 am

"Perception of 7th-Century London," Katherine Phillips Walsh, Nov; 6, 1070 ILA, 9 am

"Characterization of the Effect of Chronic Kidney Disease on Renal Hypertrophy: Reduction in Renal Hypertrophy," Osama Abougalal, Nov; 7, 1055 SAB, 9 am

"Plooid Cell Assembly of Segregative Steps in Cancerous Normal Tissue," William Yee, Nov; 7, 169 Crawford, noon

CIDEDE TA Workshop
"Developing A Lemma Plan," G4 Hilleman, 7 pm (see (riddle.piidel@uiuc.edu / workshops)

Pharmacology & Chemical Biology Seminar
"Every Man Shall Know Their ABCs and Cancer: Reversal Prostate Cancer," Trevor Prattinger, Pn, 1395 BST, 2:30 pm (see (jackson.piidel@uiuc.edu / workshops)

Bradford Campus Non-Tenured Student Admissions Session
"With Clark," UPB, 6:30-8:30 pm (see (jackson.piidel@uiuc.edu / workshops)

Engineering Nuclear Night Keynote: Sir Keith O’Haire, 6 pm (see (engineering.piidel@uiuc.edu / workshops)

Wednesday 19

IEEE Workshop
"The Age of Context," Robert Scoble & Shel Silver, Regional Leadership Alliance, Cancer, 3:00 PM (see (ieee.piidel@uiuc.edu / workshops)

"How to Identify and Learn from a Great Deal of Information of Interest From Evolving Sequencing Results," Blandine Wood, Tangerine, Folk Library class, 2:00 PM (see (jackson.piidel@uiuc.edu / workshops)

CIDEDE TA Workshop
"Teaching With PowerPoint,” 2pm, G4 Hilleman, 10:30-11:30 AM (see (jackson.piidel@uiuc.edu / workshops)

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"Teaching With Powerpoint,” 2pm, G4 Hilleman, 10:30-11:30 AM (see (jackson.piidel@uiuc.edu / workshops)
Mark A. Nordenberg Lecture in Law, Medicine and Psychiatry

Miedicaid Expansion Policy, Politics and Waivers: Pennsylvania and Beyond

Sidney D. Watson, JD
Professor of Law
St. Louis University School of Law

Thursday, November 20, 2014
12:30 p.m. - 1:30 p.m.
Barco Law Building
Courtroom - Ground Floor
3900 Forbes Avenue - Oakland

Open to the Public

This program has been approved by the Pennsylvania Continuing Legal Education Board for (1) hour of所属专业 credit. There is a $10 fee for processing CLE credit for this event.
Wednesday 12

Donald Blechman Medicine Lecture
“Liver: Transplantation 2014: A View From Both Sides of the Table,” John Daly, Temple, Scalf tiny 6, 4 pm (kerwin@upmc.edu)

Hepatology Roundtable
“Principles of Living Donor Selection,” Abhijit Hunsaw, E174 Mount Washington, 7 pm (schur@upmc.edu)

Family Medicine Grand Rounds
“Community Improvement Through Family Practice Clerkship,” William Shockel, Scalf lect., 1, 8 am (ashockel@upmc.edu)

Health Sciences Laureate Lecture
“The Battle of B Cell Autoimmunity & Infection,” Philippe Mansel, U of CO Scalf lect. rm. 6, noon (philippe.mansel@uchsc.edu)

Avery Voitl Distinguished 503 Broadway Pl, 2 noon

Medical Workshops
“Sustainability and the Social Sciences,” Paul Sturlock, 2017;CL, noon (paul.sturlock@upmc.edu)

“A Meeting of Important People”, R. Noish’s Place, lower level WUP, noon (patricia2007totten@gmail.com)

Robert S. Totten Lecture
“Mind-Body Connection: Beyond the Usual,” Verna Reynolds, Coonell, 1104 Scalf, 2017

SAC 102, Branchw. noon

HSLS Workshop
“Pathways, Anatomy, Trails 2;” Austonn Chortopaydaw, Pk Library class 2, 1, 3 pm (austonn.chortopaydaw@upmc.edu)

Senate Council Mug.
2700 Peruse, 3 pm

GI Grand Rounds
“Centers of Excellence: Neurogastroenterology & Motility Disorders”, 1104 Scalf, pm (scalf@upmc.edu)

CONTINUED ON PAGE 14

Riders Wanted

Ypsi Pontoon to Oakland
Miss Clay Park sets off from the Lib partic, 6pm (call: 734-769-2609) to meet at the Lib partic (call: 734-769-2609) to meet at the Lib partic (call: 734-769-2609) to meet at the Lib partic (call: 734-769-2609) to meet at the Lib partic (call: 734-769-2609) to meet at the Lib partic (call: 734-769-29)

Subjects Needed

Computer Research Study
Recruiting now for the University of Michigan Med-Mech Center (UMM), are seeking participants (male/female) for a study of a computer game. The overall goal is to help people relax. The study participants will be compensated.

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