Education Justice Project takes higher education to prisoners

By Dusty Rhodes

A new study links exposure to the herbicide atrazine with reproductive problems in animals.

Herbicide effects

A new study links exposure to the herbicide atrazine with reproductive problems in animals.

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Nontraditional students Rebecca Ginsburg, a professor of landscape architecture, co-founded the Education Justice Project, which provides upper-division courses to qualified prison inmates. "The students are sophisticated, serious, mature and very intelligent," she said.

In EJP, they have access to a broad spectrum of courses ranging from psychology, philosophy, architecture and poetry to economic theory, politics, the Roman Empire and the Holocaust, as well as reading groups and workshops five days a week. Instruction is provided by about 75 volunteers - a mix of UI faculty members, graduate students and community members. The SEI PRISON EDUCATION, PAGE 3

Wise to host town hall meeting Dec. 6

The campus community is invited to a town hall meeting hosted by Chancellor Phyllis M. Wise at 4 p.m. Dec. 6 in the Colwell Playhouse at the Krannert Center for the Performing Arts.

According to Wise, the purpose of the meeting is "to provide a preliminary summary of what I have gathered in my ongoing Listening and Learning Tour and, secondly, to hear from you as to what our untapped potential is and how we can best position this university to achieve even greater successes in the years to come."

Wisconsin also serves as vice president of the university, said it is the first of what she believes will be regular meetings to allow campuswide participation in guiding the future of the university. This is an approved event so employ- es may get release time from their jobs with prior approval - to attend.

For those not able to attend, the event will be streamed live on the HERE and New Video sections of the Illinois homepage (http://illinois.edu/here_now/videos.html). It will be archived at http://go.illinois.edu/TownHall_ULC. Cable Television also will re-broadcast the event at 6 p.m. Dec. 9 and at noon Dec. 10.


Expert: Cloud vital for businesses

By Phil ClClera Business and Law Editor

Cloud computing is a game-changer for businesses, which now face the choice of adapting to the demand for ubiquitous access to data or losing customers to tech-savvy competitors, says a UI expert in e-business strategy and information technology management.

Michael J. Shaw, a professor of business administration, says big data is here to stay, and businesses need to adapt to the new reality that cloud computing is not merely the next Silicon Valley dot-com bubble.

"If your competitors move to the cloud and you don’t follow, that gives them a distinct advantage, because it introduces more intimacy in their relationship with their customers, so they can react to what customers want more quickly," said Shaw, the Leonard C. and Mary Lou Hoeft Chair of Information Systems at Illinois.

"You can almost sense the shifting consumer demand," he said. "I think it’s going to evolve into something that is going to be here to stay for the long-term. It’s a model that comes from several developments — access to computers, better networking and the need of the consumer and enterprise users."

Shaw says this should be a real wake-up call for businesses, because not only is cloud computing a huge leveler of the playing field, it’s also a chance for firms to run their business more economically and efficiently.

"It provides a new business model that many potential clients might like," he said. "Companies are starting to adapt to the cloud, and the rules are changing with the cloud."

WHAT IS ‘CLOUD COMPUTING?’

While there is no universally accepted definition of "cloud computing," it generally refers to Internet-based software that allows data to be saved online, and is accessible at any time, anywhere from any device with a Web connection. Since both the software and files aren’t stored locally (that is, on the hard drive of a personal computer), they are considered to exist "in the cloud."

To the cloud ... Michael J. Shaw, a professor of business administration and expert in e-business strategy and information technology management, says businesses need to adapt to the new reality that cloud computing is not merely the next Silicon Valley dot-com bubble. They can integrate their applications, which is greatly needed because it’s more efficient in terms of resources.”

Nontraditional students Rebecca Ginsburg, a professor of landscape architecture, co-founded the Education Justice Project, which provides upper-division courses to qualified prison inmates. "The students are sophisticated, serious, mature and very intelligent," she said.

In EJP, they have access to a broad spectrum of courses ranging from psychology, philosophy, architecture and poetry to economic theory, politics, the Roman Empire and the Holocaust, as well as reading groups and workshops five days a week. Instruction is provided by about 75 volunteers – a mix of UI faculty members, graduate students and community members. The SEI PRISON EDUCATION, PAGE 3

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INSIDE ILLINOIS ONLINE: news.illinois.edu/ii/ • TO SUBSCRIBE: go.illinois.edu/iisubscribe
By Mike Helenthal
Assistant Editor

Amid changes, department still offers basic printing services

By Mike Helenthal
Assistant Editor

Amid changes, department still offers basic printing services

Rumors of the death of a one-stop, on-campus printing solution have been exaggerated.

Managers of the UI’s Document Services department say recent changes – including a name change – will lead to better service and a better bottom line for it and its campus customers.

“The big thing is, we’re still here and we’re still doing the things we were always doing,” said Barbara Childers, the department’s director and Facilities and Services associate director.

The future of the department, once called Printing Services, was called into question when F&S announced in 2010 it would be closing following a “fiscal and functional” review.

In fact, F&S was so convinced of its likely closure that a date of June 30, 2012, was set but then dropped after the review showed a more streamlined document services provider could be an economically viable option for serving the campus.

Childers said the streamlining discussions led to the elimination of “costly and underutilized services,” which included letterpress printing, large offset production and some bindery functions.

Much of the larger equipment was sold at auction, mailing and ongoing printing functions were consolidated on the first floor of the former Printing Services building at Gregory Drive, and the number of employees was cut in half.

Childers said the goal of the changes is to better serve campus customers.

“We can handle most of those quick turnaround (jobs) – that’s what this place does best,” Childers said. “By eliminating the services that we did, we now can be a more effective, one-stop provider.”

Andy Blacker, F&S publicity and promotions manager, said while the Printing Department review turned up achievable efficiencies, it also showed the importance of having the service based on campus. He said interviews with campus customers indicated the need.

“With the mailroom coming here, there’s been a synergy that we didn’t have before,” Fitch said. “It’s been very efficient for us.”

Officials plan to soon release a new order form to highlight available services.

The campus copy center in Room 143 of the English Building also will continue to operate.

“‘The response we had from on-campus customers was great,’” he said. “‘The ease of use is a huge benefit for the campus.’

‘The new-and-improved Document Services department will continue to print business cards, brochures, stationery, envelopes, posters, presentations, programs, classroom resources, self-published books, as well as offer full-service mailing preparation. The new configuration does not allow for some of the higher-volume, specialty printing projects.

Duane Fitch, copying and mailing services manager, said Document Services managers continue to find benefits to the consolidation of printing and mail services – which extends to the use of employees as workflow dictates.

“We’ve changed the Jobs and News Distribution is by campus mail.

The campus Office of Public Affairs, administered by the associate chancellor for public affairs. Information about Inside Illinois is published on the first and third Tuesday of each month by the News Bureau of the campus Office of Public Affairs, administered by the associate chancellor for public affairs. Distribution is by campus mail.

News is solicited from all areas of the campus and should be sent to the editor at least 10 days before publication. All items may be sent to dkdahl@illinois.edu. The campus mail address is Inside Illinois, 507 E Green St., Room 345, Champaign, MC-428. The fax number is 217-244-0161.

Inside Illinois is an employee publication of the Urbana-Champaign campus of the University of Illinois. It is published on the first and third Tuesday of each month by the News Bureau of the campus Office of Public Affairs, administered by the associate chancellor for public affairs. Distribution is by campus mail.

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On the Job

Andy Burnett walks around the Urbana campus like he built the place.

That’s because Burnett, a 14-year UI employee and Facilities and Services millworker, has in fact had a hand in building quite a bit of it.

“People see this thing going around campus and being able to point out some of the work we’ve done,” he said from the Physical Plant building on Oak Street. “We’ve done work on about every building.”

From the eye-catching bay windows at the Illini Union to the massive wood-shaping machinery and a lab from top to bottom, to the almost mindless perfection required to construct dozens of traffic barricades at a time — reminders of Burnett’s work are everywhere.

His “office” is a workstation in a corner of a sprawling woodworking room covered with wood-shaping machinery and a recurring layer of sawdust. It’s a place where plans are drawn, measurements are made and wood gives way to blade.

But on any given day, you’ll find Burnett and the other millworkers cast about at locations across campus, each focusing on any number of possible projects.

He said he thrives on the variety.

While he enjoyed helping to build the new student union floor on the second floor of the Alice Campbell Alumni Center, he still finds a certain Zen on the days he’s building no-frills barricades.

“In this job, you can’t let yourself become pigeonholed,” he said. “Sometimes you need the kind of stuff, but you’ve still got to have pride in what you’re doing.”

His most-recent work can be found at the Chemical Life Sciences building, where he has designed and custom-built cabinetry, tables and other wood-accented pieces for an incoming professor’s laboratory.

There is autonomy in the specific work of each trade, but each trade also provides some level of input and manpower on most projects — making it at once an individual and a group effort. Burnett may frame and cut a project, but painters finish it and carpenters install it.

“We all kind of have specialties in our shop, but we’re quick to help each other if it’s a two-man job,” he said. “If you’re not exactly sure how to do something, you just ask somebody else and they’ll give you a different perspective.”

He said that ethic is shared by everyone it works with, which makes his job a daily learning experience as well.

“Certain guys build their drawers one way, other guys build them another way,” he said. “I don’t mind how they do it, the main thing is the end result — it has to work.”

Burnett’s path to the UI — or for that matter, a 14-year career — wasn’t a straight one.

He’s a lifelong resident of the area, having attended Urbana High School and then enrolling in the UI’s art and design school. While at the UI, he was in the Marching Illini drum line.

He cut the college career short after following the call of the road and becoming a touring musician. His band recorded, toured the Midwest and even performed in Japan before calling it quits after 15 years. (Burnett still plays drums with two area blues bands: the Blues Deacons and the Keith Harden Band.)

“I quit school to become a rock star,” he said. “And then when it was over, I decided I needed a real job and started building houses with a buddy. Fine trim was my niche.”

He started at the UI as a building service worker, maintaining campus buildings on the night shift for three years. He said he was simply biding his time until a trade position opened.

“That’s where my background was and I trusted God that I would eventually get the job I wanted,” he said. He said his father was a jack-of-all-trades who could repair just about anything. Some of that mechanical talent no doubt rubbed off.

“I’ve always been interested in working with my hands and as far as woodwork, it’s something I just naturally took to,” he said.

Burnett has settled down a lot from his “long-hair” days, though the long hair part was a less-conscious decision than the lifestyle. He’s been married for 18 years and lives on a farm with horses, chickens and four daughters — the youngest who is 10 and the oldest who is attending Southern Illinois University. He is an active member of New Horizon Church and credits God with his current satisfied station in life.

“My home life is great and I work with a great bunch of guys who are like brothers,” he said. “I’m blessed.”

On the Job features UI staff members. To nominate a civil service employee, email insidel@illinois.edu.

Quality first

Andy Burnett, a 14-year UI employee and a Facilities and Services millworker enjoys the variety of construction projects he works on at the Urbana campus, as well as the camaraderie found among mill shop coworkers. Burnett said the key to his work is considering quality in every project, whether it’s an easy job or a complicated one.

EJP students also are working on a “productive landscape” program, transforming the existing prison garden into a biodiversity laboratory, and they are formulating a program to prevent youth violence in their home neighborhoods in Chicago. Further more, they are aiding in the documentation of every part of EJP, to help Ginsburg and the other instructors produce the kind of scholarly work that could persuade other universities and prison systems to follow their lead.

“We don’t see this as a discreet program in which we’re educating a few men and they feel better and they get smarter,” Ginsburg said. “Because we’re at a research-oriented university, we believe that we have a really lovely opportunity and responsibility to produce scholarship that makes the case for providing higher education to incarcerated people.”

The Education Justice Program is funded by grants and private donations. For more information, email Ginsburg at rginsbur@illinois.edu.

On the Web

www.educationjustice.net/home/
Campus lab safety issues getting a second look

By Mike Helenthal

Assistant Editor

When it comes to laboratory safety, there aren’t any second chances. Or are there?

According to Peter Ashbrook, the director of the UI’s Division of Research Safety, several high-profile accidents at national research universities over the past three years have prompted the university to revisit its own approach to lab safety.

“I don’t know if it’s an increase in (accident) frequency or increased reporting,” he said. “But when an academic community is certainly aware.”

And so is the U.S. Chemical Safety Board, which released a report on laboratory safety and an accompanying video in October directed at university labs.

The 24-minute video, “Experimenting With Danger,” uses two of the most recent accidents – a 2008 fire death in a lab at the University of California at Los Angeles and a 2010 explosion at Texas Tech University that seriously injured a graduate student – to illustrate the need for added precaution in following well-known lab safety procedures.

“Research conducted at university laboratories is often on the forefront of technological advances, and the potential hazards are pretty wide – it’s a long laundry list,” he said. “Chemistry is usually the department you think about first, but there is a whole universe of things that could go wrong in all of the sciences.”

Plus, the types of research and accompanying regulations change frequently, making it difficult for any one person to know all of the applicable rules.

To ensure all labs are following specific safety procedures, Ashbrook’s office relies directly on each lab’s assigned “principal investigator” – the point person charged with ensuring lab compliance.

“All of the safeguards make an accident less likely, but they still do happen,” he said. “Accidents happen to the best of people. That’s why it’s not just a matter of trying to do as good a job as we can – we have to be able to do better.”

Ashbrook’s office offers training and consultation to campus units focusing on safety and conducts audits to determine if policies are being adhered to. He said the office also is working on a tool to identify major hazards that regularly cross research disciplines.

“Safety requires constant attention,” he said. “People tend to get complacent when something goes wrong, we should learn from it.”

That’s why the continued promotion of a “safety culture,” where both students, staff and professors take responsibility for a safe working environment, is so important, he said.

One common policy is to avoid working alone in the lab, just in case something goes wrong, he said. The temptation to work by oneself grows during the holidays, when research groups may be split up while on break.

“We have to have people looking out for each other,” he said. “The vast majority of students won’t experience an accident of a major nature, so safety is kind of a value judgment because people have different perceptions. It’s almost like, if you don’t see (an accident) yourself, it’s a fantasy.”

Being safe also can take more time, something that doesn’t always fit well within the deadline-driven research environment. Some campus researchers regularly complain that myriad regulations make it difficult to complete tasks.

“That’s something we definitely struggle with,” Ashbrook said, noting a recent study showing that researchers spend nearly half their time meeting regulatory guidelines – and not conducting research.

“That’s one of our challenges – how to give good guidance while allowing them to make the most efficient use of their time. As humans, we don’t stay on red alert 24/7 – so how do you decide what are reasonable precautions?”

Case study offers new insights into research safety

The U.S. Chemical Safety Board, charged with investigating industrial accidents, has collected data on 120 incidents at national university lab and research facilities since 2001, using the information to offer a new lesson guide aimed specifically at university-level research. They include:

- Ensuring safety personnel report directly to university officials with authority to oversee research labs and to implement safety improvements.
- Documenting and communicating all laboratory “near-misses” and incidents to educate and track university safety.
- The CSB’s case study is a call to academia to examine internal safety policies and procedures for research labs, the CSB’s Rafael Moure-Eraus said.
- “It’s also an opportunity for research funding agencies to require universities to ensure that effective safety systems are in place before awarding grants for scientific studies.”

Memorial service

A memorial service for Henry Hultman Hadley will be at 10 a.m. Dec. 10 at Grace Lutheran Church, 313 S. Prospect Ave., Champaign. Burial will be in Grandview Memorial Gardens, Champaign.

Hadley, 94, died Nov. 23 at Carle Foundation Hospital, Urbana. Hadley was a professor emeritus of agronomy in the College of Agricultural, Consumer and Environmen- tal Sciences. He retired in 1987 after 30 years at the UI. Memorials: Grace Lutheran Church.

Lab safety

Peter Ashbrook, the director of the UI’s Division of Research Safety, said recent high-profile laboratory accidents at national research institutions have spurred a renewed effort to improve campus lab safety procedures. At the UI, lab safety is the purview of a “principal investigator” charged with ensuring best practices and procedures are being followed. The Urbana campus has an estimated 800 to 3,000 labs, many of them contained within multistation suites.

Deaths


Eular Henderson, 89, died Nov. 17 in Champaign. Henderson worked at the university for 25 years as a head cook. Memorials: St. Christopher Church, 1501 E. Grove Ave., Rantoul, IL 61866.

Florence E. Nesler, 91, died Nov. 15 at Burtisdale Roberts, 86, died Nov. 14 at Carle Foundation Hospital, Urbana. Roberts worked as a maintenance inspector in the deadline-driven research environment. Some campus researchers regularly complain that myriad regulations make it difficult to complete tasks.

“That’s something we definitely struggle with,” Ashbrook said, noting a recent study showing that researchers spend nearly half their time meeting regulatory guidelines – and not conducting research.

“That’s one of our challenges – how to give good guidance while allowing them to make the most efficient use of their time. As humans, we don’t stay on red alert 24/7 – so how do you decide what are reasonable precautions?”
NEW faces 2011

Among the newcomers to the Urbana campus are faculty members whose appointments began this summer or fall. Inside Illinois continues its tradition of introducing some of the new faculty members on campus and will feature at least two new colleagues in each fall issue.

Ying Chen

an assistant professor in the School of Labor and Employment Relations
Education: Ph.D. (organization studies), Vanderbilt University; M.A. (sociology), University of Toledo; M.A. (labor economics), Capital University of Economics and Business, China; B.A. (sociology), Nankai University, China.
Research Interests: Cross-cultural management, employment relations and conflict management. Chen focuses on relationships between organizational leaders and members in China and the U.S.

“This is an important area of research where she is identifying crucial differences in workplace relations between the U.S. and Chinese contexts, including team leadership, norms of reciprocity and other matters,” said Joel Cutcher-Gershenfeld, a professor and the dean of the School of Labor and Employment Relations. “Professor Chen also will teach our international and comparative employment relations course and other classes. We are very excited to have her join our community.”

Courses: S900ERC, “Labor and Employment Relations in China.” Why Illinois? “I have found my academic home,” Chen said. “LER at Illinois is a place that I feel that I can fit in, contribute to, work with world-class faculty and teach highly motivated students with many different backgrounds from all over the globe,” Chen said. “I was proud to have the opportunity to join the school and become part of the LER community.”

Ting Lu

an assistant professor of bioengineering in the College of Engineering.
Education: Ph.D. (biophysics) and M.S. (physics), University of California at San Diego; B.S. (physics), Zhejiang University, Hangzhou, China.
Research Interests: Systems and synthetic biology, an interface of biology, engineering and physical sciences. Lu is interested in the dynamics and associated functions of biological networks as well as the engineering of de novo gene circuits. He will investigate multiscale dynamics of gene regulation, the interface of synthetic biology with DNA nanotechnology and human gut microbiota. He hopes to uncover design principles of biological systems for therapeutic and environmental applications.

“Ting was highly recruited to campus for his expertise in theoretical and experimental synthetic biology,” said Michael F. Insana, a professor and the head of bioengineering. “He models and designs bacterial systems for human medicine applications. His approach is unique in that his computational designs are balanced by his ability to produce the re-engineered designs in his lab and test their effectiveness. He is interested in probiotics for gastrointestinal health and other novel therapeutic delivery systems.”


Why Illinois? “The university has a longstanding tradition of excellence as a world-class leader in research and teaching,” Lu said. “Our bioengineering department has assembled an amazing team of faculty and students with extreme intelligence and enthusiasm, I’m so excited about launching my research program here and joining the team to make this place the best for bioengineers.”
Herbicide spurs reproductive problems in many animals

By Diana Yates
Life Sciences Editor

A new review by an international team of researchers has reviewed the evidence linking exposure to atrazine – a herbicide widely used in the U.S. and more than 60 other nations – to reproductive problems in animals. The team found consistent patterns of reproductive dysfunction in amphibians, fish, reptiles and mammals exposed to the chemical.

Atrazine is the second-most widely used herbicide in the U.S. More than 75 million pounds of it are applied to corn and other crops, and it is the most commonly detected pesticide contaminant of groundwater, surface water and rain in the U.S.

The new review, compiled by 22 scientists studying atrazine in North and South America, Europe and Japan, appears in the Journal of Steroid Biochemistry and Molecular Biology.

The researchers looked at studies linking atrazine exposure to abnormal androgen (male hormone) levels in fish, amphibians, reptiles and mammals and studies that found a common association between exposure to the herbicide and the “feminization” of male gonads in many animals.

The most robust findings are in amphibians, said UI comparative biosciences professor Val Beasley, a co-author of the review. At least 10 studies found that exposure to atrazine feminizes male frogs, sometimes to the point of sex reversal, he said.

Beasley’s lab was one of the first to find that male frogs exposed to atrazine in the wild were more likely to have both male and female gonadal tissue than frogs living in an atrazine-free environment. And in a 2010 study, Tyrone Hayes, a professor of integrative biology at the University of California at Berkeley and lead author of the review, reported in the Proceedings of the National Academy of Sciences that atrazine exposure in frogs was associated with “genetic males becoming females and functioning as females,” Beasley said.

“And this is not at extremely high concentrations,” he said. “These are at concentrations that are found in the environment.”

The new review describes the disruptions of hormone function and sexual development reported in studies of mammals, frogs, fish, reptiles and human cells exposed to the herbicide. The studies found that atrazine exposure can change the expression of genes involved in hormone signaling, interfere with metamorphosis, inhibit key enzymes that control estrogen and androgen production, skew the sex ratio of wild and laboratory animals (toward female) and otherwise disrupt the normal reproductive development and functioning of males and females.

“One of the things that became clear in writing this paper is that atrazine works through a number of different mechanisms,” Hayes said. “It’s been shown that it increases production of (the stress hormone) cortisol. It’s been shown that it inhibits key enzymes in steroid hormone production while increasing others. It’s been shown that it somehow prevents androgen from binding to its receptor.”

The review also consolidates the evidence that atrazine undermines immune function in a variety of animals, in part by increasing cortisol.

“Cortisol is a nonspecific response to chronic stress,” Beasley said. “But guess what? Wildlife in many of today’s habitats are stressed a great deal of the time. They’re stressed because they’re crowded into little remnant habitats. They’re stressed because there’s not enough oxygen in the water because there are not enough plants in the water (another consequence of herbicide use). They’re stressed because of other contaminants in the water. And the long-term release of cortisol causes them to be immunosuppressed.”

There also are studies that show no effects – or different effects – in animals exposed to atrazine, Beasley said. “But the studies are not all the same. There are different species, different times of exposure, different stages of development and different strains within a species.” All in all, he said, the evidence that atrazine harms animals, particularly amphibians and other creatures that encounter it in the water, is compelling.

“I hope this will stimulate policymakers to look at the totality of the data and ask very broad questions,” Hayes said. “Do we want this stuff in our environment? Do we want – knowing what we know – our children to drink this stuff? I would think the answer would be ’no.’”

Herbicide Impact UI professor emeritus of comparative biosciences Val Beasley and his colleagues reviewed the evidence linking atrazine exposure to reproductive problems in amphibians, fish, reptiles and mammals. The team found consistent patterns of reproductive dysfunction.

Abnormalities Researchers found many reproductive abnormalities, such as the presence of oocytes (eggs, in center of image) inside male frog testes.
Study shows acid pollution in rain decreases with emissions

By Liz Ahlberg
Physical Sciences Editor

Emissions regulations do have an environmental impact, according to a long-term study of acidic rainfall by researchers at the UI.

The National Atmospheric Deposition Program collects rainfall samples weekly from more than 250 stations across the United States and analyzes them for pollutants. The program recently released a report detailing trends in acidic rainfall frequency and concentration over 25 years, from 1984 to 2009.

“This is the longest-term, widest-scale precipitation pollution study, in my estimation,” says UI law professor Richard L. Kaplan, an expert on taxation and retirement issues.

The phenomenon commonly known as “acid rain” has widespread effects not only on the ecosystem but also on infrastructure and the economy. Polluted precipitation adversely affects forestry, fishing, agricultural crops, and other industries. Acid also erodes structures, damaging buildings, roads, and bridges.

According to the report, acidic precipitation — rain or snowfall with a pH value of 5.0 or less — decreased in both frequency and concentration over the 25-year span.

The researchers largely attribute the decrease to the amendments to the Clean Air Act in 1990 regulating emissions of sulfur dioxide and nitrogen oxide, the gases that react with rain water to become sulfuric and nitric acid when mixed with rainwater.

“What goes up does come down,” Lehmann said. “Rainfall chemistry directly correlates with air pollution. When we looked at the magnitude of the trend, we found it compared very well to the magnitude of the decrease in emissions reported by the EPA (Environmental Protection Agency).”

SEE ACID RAIN, PAGE 8

Measuring Inflation

Although switching to a different consumer price index would slow the growth of the federal deficit, it’s not a complete answer to our fiscal problems, says law professor Richard L. Kaplan.

Expert: New inflation index could reduce budget deficit

By Phil Ciciora
Business and Law Editor

Switching to a different consumer price index would slow the growth of the federal deficit, but it’s not a complete answer to our fiscal problems, says UI law professor Richard L. Kaplan.

According to Kaplan, switching the consumer price index to the so-called “chained” consumer price index assumes greater consumer response to price increases.

“The current CPI assumes that if the price of McIntosh apples goes up, some consumers will buy less expensive Golden Delicious apples instead,” he said. “But the ‘chained’ CPI assumes that these consumers will buy a different type of fruit entirely, such as oranges or bananas, thereby lowering their cost of food.”

If inflation were measured as lower than under the existing index, certain key components of the federal income tax would not increase as much, Kaplan says.

“For example, the starting amounts for the tax brackets are indexed for inflation, as are the personal exemption and the standard deduction,” he said. “If these amounts rise more slowly, the income tax will bring in more revenue than current law provides.”

Similarly, various government benefits that are tied to inflation would increase more slowly.

“Annual cost-of-living adjustments for Social Security payments are based on the CPI, so lower inflation translates into smaller benefit increases,” Kaplan said. “From the government’s perspective, it’s a win-win: more income coming in and less expense going out.”

According to Kaplan, changing the measure of inflation could be controversial.

“The purpose of inflation adjustments is to accurately determine the extent of inflation that people confront, and there is no empirical evidence that real-life consumers respond to price increases in the manner that the ‘chained’ CPI assumes,” Kaplan said. “If they do not make the sort of product substitutions that the new inflation measure assumes, the ‘chained’ CPI will not be an accurate reflection of inflation.”

Furthermore, certain consumers face different levels of inflation even under current practices.

“Older Americans, for example, typically spend a much higher proportion of their budgets on health care expenses than other goods and services,” he said. “Consequently, the current CPI understates the level of inflation that most Social Security recipients experience.”

For that reason, the Bureau of Labor Statistics compiles the CPI-Elderly, which includes a larger component for medical outlays.

“That is a critical feature, because health care costs generally rise faster than other goods and services,” he said.

But applying the CPI-Elderly to Social Security benefits would probably increase government expenditures — “and that is not a path that most policymakers want to pursue right now,” Kaplan said.
These uprisings appeared to come out of nowhere, similar to when the Iron Curtain fell two decades ago in Eastern Europe. Populist uprisings in dictatorships are inherently unpredictable. Because of severe repression, uprisings cannot publicly express their political attitudes and are often afraid to reveal the intensity of their opposition to the regime even to their relatives or colleagues. This is a serious obstacle to any opposition movement: Opposition leaders or potential defectors from the regime’s leadership cannot gauge the extent of public support they would enjoy if they called for an overthrow of the regime. This is why, when we do observe successful uprisings against autocrats, they are often triggered by focal events – such as the self-immolation by the Tunisian street vendor last December – and thus unexpected.

Authoritarian regimes have internal security forces to repress any opposition, and they obviously had been effective in these countries for many years. Why have they been unable to prevent or put down these uprisings?

All dictatorships repress to some extent, but none has the capacity to defeat a mass opposition movement that involves a significant fraction of a country’s population. The intuition behind this is not too distant from the one behind bankruptcies of many financial institutions during the recent financial crisis. Banks carry enough cash to go bankrupt when a large number of their depositors suddenly decide to withdraw their savings. In a similar fashion, any dictatorship maintains enough repressive capacity to counter isolated challenges to its stability. But it is simply infeasible for any dictator to maintain enough repression in channel to defeat a widespread uprising of several tens of thousands. And of course, there is the self-immolation by the Tunisian street vendor last December – and thus unexpected.

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The deposition program continues to monitor sulfur and nitrogen compounds in rain. Although acidic precipitation has decreased, it has not disappeared, particularly remaining prevalent across the eastern U.S. In addition, the program has expanded its screening and monitoring of other problematic pollutants such as ammonia and mercury.

“I want you to make sure that the regulations you put in place are effective, that they do what they were designed to do,” said David Gay, the coordinator of the deposition program. “That’s why we’re here. We spend a lot of money to promulgate regulations. There’s a lot of concern about their impact on industry. This study shows clear, significant evidence of the direct impact of regulation.”

A Minute With Milan Svolik

“Even the trend is down, and we should celebrate that, but it’s still a problem. There is still progress to be made, and there are new regulations coming along to continue to reduce emissions of sulfur and nitrogen compounds.”

The Illinois State Water Survey is a unit within the Prairie Research Institute at the U. I. U.

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Oct. 28, 2011

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UI highest of U.S. public schools for international students

By Matt VanderZalm

The University of Illinois Urbana-Champaign campus had the highest enrollment of international students of all public colleges and universities in the U.S. in 2010, according to a report released Nov. 14 by the Institute of International Education. Only the University of Southern California, a private school, had a higher enrollment of international students.

International enrollment at the UI, as compiled for the Open Doors report, was 7,991 as of fall 2010, with 7,271 of those on campus as graduate or professional students (3,794) or as undergraduates (3,477). Total student enrollment was 41,949.

The other 720 had completed their academic studies but remained in the U.S., working under a program known as Optional Practical Training. (All of the schools’ working under a program known as Optional Practical Training. Total student enrollment numbers include OPT for the purposes of the report.)

“This is great news because it says to me that nations around the world recognize the excellence in our faculty, academic programs, research and facilities,” said Phyllis M. Wise, the Urbana chancellor and UI vice president.

“American universities on the Pacific Rim are easily accessible to students from Asia,” Wise said. “But for international students from Asia and really from anywhere in the world in whom to choose to come, we have truly become a recognized global university.”

Having international students on campus is an asset in helping better prepare thousands of Illinois high school graduates now at the UI to become leaders in the global society, according to Wolfgang Schlör, interim associate provost for international affairs. “International students add to the diversity of backgrounds and perspectives among our student body and provide a richer cultural and academic experience for everyone,” Schlör said.

Ranked first in terms of international student enrollment in 2010, USC reported 8,615 international students.

Following Illinois among public institutions were Purdue University and the University of California at Los Angeles. Nine of the top 20 institutions on the Open Doors list, including both publics and privates, are Big Ten universities.

The numbers confirm Illinois’ continued commitment toward becoming a true “global university,” Schlör said. In 2008, Illinois won the Senator Paul Simon Award for Campus Internationalization, and UI students that year also approved — and recently renewed — a 55 per semester student fee to fund the Illinois 4 Illinois (I4I) study abroad scholarships.

Overall, the number of international students at colleges and universities in the United States increased by 4.7 percent to 723,277 during the 2009-10 academic year, according to the Open Doors report. This represents a record high number of international students in the United States, driven largely by a 23.3 percent increase in the number of Chinese students.

The Institute of International Education has conducted an annual census of international students in the U.S. since its founding in 1919. Open Doors has been published by the institute since 1949, and has received support from the Bureau of Educational and Cultural Affairs in the U.S. Department of State since the 1970s.

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Getting campus news just got a little easier

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The cost is $100 for UI students, $125 for faculty and staff members and retirees, and $150 for the public. Payments must be made at the time of registration. There will be no refunds after Jan. 3. For online registration and payment, go to http://www.slcl.illinois.edu/resources/iflip/ or email SLCL@illinois.edu.

The event, the second in this year’s Distinguished Teacher-Scholar series, was organized by professor Kelly Tappenede, the 2011 Distinguished Teacher-Scholar "Time-saving Assignments and Peer Projects That Increase Student Success." Participants are encouraged to register by Dec. 9.

The event will be held in the Alder Conference Center on Dec. 9, from 4-5:30 p.m. Registration is free and open to the general public. Faculty members and instructors are invited to a Dec. 9 noon meeting about teaching.

The event will be the featured speaker for the Distinguished Teacher-Scholar series. Holm, who recently finished her appointment as the department's international affairs officer, said she was a teaching tool for many of the department's undergraduates said Holm, who was a senior active reactor operator while earning his NPRE master's degree in 1990.

Holm said the UI Reactor Safety Committee reviewed all work procedures and quality assurance requirements in the removal of the building and remediation of all radioactive components. The $4 million project is scheduled for completion by summer 2012.

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Dismantling of campus nuclear reactor under way

A significant decision as to what to do with the site once the building is down.

"First they will come in and remove the radioactive components. The radioactive material, estimated at 100 cubic meters, will be shipped to a waste facility in Utah. "The cost of the radioactive disposal is a quarter of the cost of the entire project," Holm said.

Workers will encase the cutting operation with plastic shields, reducing any chance of the spread of radioactive contamination.

Students and others will be allowed to observe. "We’ll have access to classes," Holm said. "With prior notification, it’s OK to view this, and it’s educational. We will make it as much of a learning opportunity as possible."

"The final status will be a hole in the ground," Holm said. "There’s been no specific decision as to what to do with the site once the building is down."

The TRIGA reactor went critical Aug. 16, 1960. The university dedicated its Nuclear Reactor Laboratory on Oct. 21 that same year. The reactor was used primarily for the training of students in nuclear engineering, but also as an interdisciplinary facility, with the departments of chemistry and chemical engineering, physiology and biophysics, and physics and other engineering departments using it.

In 1968, the university approved upgrading the reactor and increasing its steady peak power. The UI, the National Science Foundation and the Atomic Energy Com-
spire Learning,” presented by Mary-Ann Winkelmes, the campus coordinator for Programs on Teaching and Learning, offers an overview of research-based tips for assignments and a look at assignments created by UI faculty members.

This session meets in Room W109 in Turner Hall. Register online at https://illinois.edu/fb/sec/966216. A video recording of the Oct. 20 presentation by professor Stephanie Ceman, “Team-Based Learning: Big Classes With Small Teams Yield More Learning,” is available, along with resources, at www.provost.illinois.edu/programs/distinguished/tappenden.html.

A final event focused on blended and online learning is scheduled for March 1.

Krannert Center Student Association
Winter Lights Festival is Dec. 4

The Krannert Center Student Association will present the Winter Lights Festival from 4 to 6 p.m. Dec. 4. This free annual holiday event, produced by the association’s student volunteers, will begin at 4 p.m. with the Justin Dyer Quintet in a 1920s-themed setting.

The I.D.E.A. Store will have a table for yuletide crafting; the UI Life Drawing Club will create custom caricatures; and the UI Vintage/Analogue/Manual Photography Club will display a photo collection during the event as well as throughout the week of Dec. 2-9.

The event is open to everyone. For more information, visit KrannertCenter.com.

English as a Second Language

English course for international scholars

During the spring semester, the Intensive English Institute will offer an English class for international scholars and postdoctoral students. The class emphasizes campus culture and oral communication skills for academic purposes.

Classes will meet for 90 minutes on Tuesdays and Thursdays from Jan. 24 to May 2 (except spring break). Enrollment will be limited and a non-refundable $275 fee will be charged.

Applicants can sign up for the course online at https://illinois.edu/fb/sec/1639999. Those signing up will be notified of acceptance and class schedule by early January. For more information, contact the Intensive English Institute at iei@illinois.edu or 217-333-6598.

Carbon sequestration project begins – a mile below Decatur

The Midwest Geological Sequestration Consortium has begun injecting carbon dioxide for the first million-tonne demonstration of carbon sequestration in the U.S. The CO2 will be stored permanently in sandstone more than a mile beneath Decatur. (A tonne is 1,000 kilograms — the equivalent of about 2,205 pounds.)

The consortium is led by the Illinois State Geological Survey at the UI. The analysis of data collected beginning in 2003 indicates that the lower Mount Simon Sandstone has the necessary geological characteristics to be an excellent injection target for safe and effective storage of CO2,” said Robert J. Finley, the director of the geological survey and leader of the survey’s sequestration team.

The consortium is one of seven regional partnerships created by the U.S. Department of Energy to foster technologies for capturing and storing greenhouse gases, which contribute to climate change.

The $96 million Illinois Basin-Decatur Project was funded in 2007. The CO2 will be injected over the next three years.

The CO2 is captured from the fermentation process used to produce ethanol at the corn-processing complex at Archer Daniels Midland Co. The gas is compressed into liquid and injected 7,000 feet underground, Finley said.

The Mount Simon Sandstone is the thickest and most widespread saline reservoir in the Illinois Basin, which covers two-thirds of Illinois and reaches into western Indiana and western Kentucky.

“Establishing long-term, environmentally safe and secure underground CO2 storage is a critical component in achieving successful commercial deployment of carbon capture, utilization and storage technology,” said Chuck McConnell, the chief operating officer for the Office of Fossil Energy in the DOE.

More about the project is available online. The geological survey is part of the Prairie Research Institute at the UI.

ON THE WEB

http://go.illinois.edu/sequestration

Dec. 1, 2011

Inside Illinois
A study details homelessness among low-income children

By Sharita Forrest
News Editor

A study details homelessness among low-income children, according to a new study led by Jung Min Park, a professor in the School of Social Work.

The study, which followed 2,631 children in 20 large U.S. cities from birth to age 6, examined the extent of homelessness and doubled-up episodes among low-income families and the impact of housing status on children's health outcomes. The research team examined five years of follow-up data on children's health and their families' backgrounds that was compiled for the Fragile Families and Child Well-being Study, which included nearly 5,000 children born between 1998 and 2000.

“Both homelessness and doubling-up are important measures of precarious housing status,” Park said. “This is the first study, to our knowledge, that provides estimates of both homelessness and doubling-up among young children. All together, about a third of the children in the study experienced either homelessness or doubling-up before they reached 6 years old.”

The study sheds light on housing instability as a common experience among low-income families, Park said.

“The scope of housing instability among children and families would be underestimated if we only focus on people living on the street or in shelters,” Park said.

Prior studies have indicated that physical and mental health problems are more common among homeless children than the general population, but there is mixed evidence as to whether children experiencing homelessness differ from other low-income children on health outcomes, Park said.

“Children in poverty, whether homeless or housed, share many of the same risk factors for health problems; therefore, it is difficult to determine which of these risk factors is linked to health outcomes, as well as homelessness,” Park said.

Park said.

“Children with a homeless episode were reported to have higher rates of physical disabilities than other low-income children who were stably housed or living doubled-up. Children who experienced homelessness also had nearly double the rate of probable emotional or behavioral problems at 15 percent vs. 8 percent of children in the stably housed group. The rate of asthma was notably high for all the children, ranging from 20.28 percent at age 5.

However, stressors common to children in poverty – such as low birth weight, poor maternal health and exposure to domestic violence – had more significant impacts on children's health and cognitive development than episodes of homelessness or doubling-up, the research team found.

“The findings indicate that it is important to identify and respond to parental and familial needs common to many low-income families – in addition to providing housing assistance – to more effectively improve the health and development of children in housing instability, particularly those in homeless families,” Park said. “Homelessness or doubling-up is just one of many stressors in their lives.”

Paul D. Allison, a sociologist at the University of Pennsylvania, and Angela R. Fertig, an economist with interests in maternal and child health who is on the faculty of the University of Georgia at Athens, were co-authors of the study.

The study was published in the American Journal of Public Health.

The research was funded by the John D. and Catherine T. MacArthur Foundation.

Professor creates ‘College for a Day’ program for local youth

By Phil Ciciora
Business and Law Editor

A program established by a UI business professor looks to generate interest in higher education and for underrepresented local high school students.

The College for a Day program not only aims to raise interest in seeking an advanced degree among local high school students, it also seeks to increase community involvement in higher education, says Hayden Noel, a professor of business administration.

The program, open to freshmen and sophomores who attend high school in Champaign or Urbana, began Nov. 16, with seven students from Centennial High School in Champaign attending.

According to Noel, the students attended a number of college exploration modules under the guidance of Quintin Scott, the College for a Day program coordinator and a UI graduate student. The modules included a college class observation, a career services session, a financial aid session, an undergraduate admissions session and a campus tour. At the end of the day, students received a certificate and a gift for their participation.

The program administrators, along with the high school college and career counselor, will contact the program participants at a later date to gauge their interest in attending college.

In the spring semester, the program will run once per month, Noel says.

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