GEO members ratify contract

Members of the Urbana campus Graduate Employees Organization voted by more than 95 percent to ratify a new contract. The new contract will protect tuition waivers at current levels for all members of the bargaining unit. Tuition-waiver protection was consistently the most important issue for GEO members during negotiations. During the course of the five-year contract, the increase to the minimum wage for GEO members will be 2.5 percent during the first two years of the contract, and then will be 1.5 percent for years three, four, and five. Approximately 40 percent of GEO members are paid the minimum wage.

The annual raise for the entire bargaining unit will be 2.5 percent during the first year of the contract, and then will be set by the Campus Wage Program thereafter. The annual increase in the members’ health care fee paid by the administration will increase from 75 percent, where it was set during the last contract, to 80 percent during the life of this agreement.

The ability to file a grievance in the case of supervisor harassment was added to the contract.

If you’re still searching for a few last-minute holiday gifts, you don’t have to go to the mall – there’s an abundance of unique items available right here on campus, most produced by U. of I. faculty and staff members and not available in stores or the usual online marketplaces. From supercomputing coloring books to gargoyles to the best travel mug we’ve ever held in our hands, these gifts also will allow you to express your U. of I. pride in colors other than blue and bright orange. We found dozens of gifts for all ages, price ranges and interests. Here are just a few.

See Gifts, Page 7

Disaster survivors: Leisure activities cultivate hope, resilience

By Sherilla Forrest

As survivors of Hurricane Sandy are learning, the emotional toll of natural disasters is as profound as their physical devastation. However, a new study of people who survived Japan’s deadly earthquake and tsunami in 2011 suggests that leisure activities can play critical roles in victims’ psychological recovery from natural disasters.

“Leisure is defined as time available for engaging in activities not required for work or household management, that provide opportunities for entertainment, self-expression, personal growth, recreation, and social interaction,” said Shintaro Kono, a graduate student in recreation, sport and tourism at the U. of I. and the author of the study, which explored stress coping and leisure behavior among survivors of the earthquake and tsunami that struck northeast Japan on March 11, 2011.

“I saw so many Japanese people struggling from the disaster with traumatic experiences and many causes of chronic stress,” said Kono, who is from Japan and was visiting a friend in the country’s northern region when the earthquake and tsunami struck.

Kono interviewed 16 disaster survivors and five volunteers who worked with them, whom he recruited while working as a volunteer in one of the prefectures in northeast Japan that suffered the most extensive damage and greatest number of casualties.

Sponsored by the nonprofit organization Make the Heaven, the Megumi-Japan project identified people believed to be at risk of health-related or mental problems. Three to five volunteers worked with each participant in reconstructing their household gardens free of charge, providing survivors with physical and recreational activity as well as regular social interaction. Volunteers also organized other recreational activities for adults who were living in temporary housing and reconstructed and maintained playgrounds for children.

The tsunami survivors’ memories of the disaster were harrowing, and the stressors they shouldered in its aftermath were substantial, including bereavement and separations from loved ones under uncertain circumstances; extensive damage or complete destruction of their homes and all their possessions; multiple relocations and the strains and difficulties associated with temporary living arrangements, and job losses and economic instability.

“One of the most important factors affecting victims’ mental health was the subjective meanings that they attached to their experiences and leisure activities,” Kono said. “What is traumatic depends on an individual’s personal history, their memories and way of thinking. Home represented not just shelter to many people in this relatively rural area of Japan, but it was the place that all a person’s memories were connected to. Therefore, losing their homes was very traumatic for those people.”

The Japanese concept of “ikigai,” of finding meaning in one’s existence, seems to have helped some tsunami survivors cultivate resilience and hope for the future. Focusing on and anticipating leisure activities such as gathering with others to engage in handicrafts, provided some survivors with purpose and motivation to sustain their coping efforts despite overwhelming stress, negative emotions and profound personal losses.

Many of the survivors, most of whom were elderly, engaged in altruistic activities after the disaster in order to repay debts of gratitude and express appreciation for help they had received. However, for some survivors, their post-disaster activities sparked transformative personal growth and the adoption of new purposes in life, especially philanthropic endeavors.

Resuming recreational activities that survivors, their post-disaster activities sparked transformative personal growth and the adoption of new purposes in life, especially philanthropic endeavors.

See Survivors, Page 4
Senate OKs creation of Center for a Sustainable Environment

By Mike Helenthal

The Urbana Academic Senate voted Dec. 3 to create the Center for a Sustainable Environment, to help develop campus sustainability strategies and provide support for interdisciplinary education, research and engagement.

"It is going to be a thriving, intensive center," said Ilesanmi Adesida, vice chancellor for academic affairs and provost, who, along with Chancellor Phyllis M. Wise, who was in India on an outreach trip, "It could actually become bigger as time goes on," he said.

The center will be housed in the chancellor’s office and is designed to “take advantage of the campus’s academic strengths in the natural sciences, engineering, social sciences, life sciences and agriculture,” he said.

"We are doing a lot on this campus," he said, "but we don’t have the impact we need to have to plot the university’s future.

"Projects that could be completed in several weeks in the past year with faculty, the campus and students, the center would move through on five recommendations formulat-

The Senate’s Committee on Campus Operations developed the proposals after a series of meetings in the past year with facilities and services leaders and students.

Chair Ben McCally, a chemistry professor, said complaints over the lag time were particularly evident in the construction of academic space for new and incoming professors.

"It’s very detrimental to our academic mission," McCally said.

The first proposal asks Wise to follow through on five recommendations formulat-

The second proposal asks U. of I. President Bob Easter to lobby state legislators to change five legislative rules that could expedi-

Deborah Lynn Autoberry, 59, died Nov. 30 at Countryview Care Center, Macomb. Autoberry worked as a kitchen helper for the University of Illinois at Urbana-Champaign and was an Extra Help employee with the University of Illinois at Springfield and was seen widely as an attempt to administratively centralize decision-

The GEO is a member of the IFT-AFL-CIO, and represents more than 2,400 teaching assistants and graduate assistants who teach more than 20 percent of all instruction hours on campus. 

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On the Job
Norris Purdy

By Mike Helenthal
Assistant Editor

For example, not only do Purdy and his co-workers have to know internal and university procedures, they also must be aware of domestic and international mailing regulations and any other special rules that may be lurking within the process. And they must do it under pressure when the delivery volume increases. “We get orders in throughout the day, so the work usually varies every day,” he said, “but we get much busier near holidays and at the end of the semester. That’s OK because I like keeping busy.”

Before coming to work for the university, Purdy worked for 11 years as the assistant manager of distribution at a medical supply company. He was born in and has spent his entire life in Urbana, where he also attended middle and high school. His father and mother are both retired, his mother working as a U. of I. building service worker for 20 years. He is the middle son of three brothers, one of whom still lives in the area.

He said a group of highly motivated co-workers makes his job easier. “Everyone here is nice and everyone helps each other when they need it,” he said. “It’s really a great and productive atmosphere to work in.”

That made him realize his work is meaningful. “Even Earth gets a turn, offering its opinion as the narrator of one chapter, as does a biblonaut – a poet astronaut constructing a spineless book,” he said. “It really meant something special.”

The award included a trophy and a $2,000 prize. He split the prize and invest-ed each half in two forward-thinking, but far different, directions. “I used half of it to get a root canal and invested the other half in the stock market,” the latter investment being one of his favorite activities outside of work.

Although he considers himself an ama-teur investor, he said he does his home-work to ensure he’s getting the most bang for his buck. “I’ve consulted with financial advisors and I watch a lot of investing shows on television,” he said, noting he became hooked on investing about five years ago.

He uses his own system to pick his stocks, and while he is regularly tempt-ed to move his investments around, he said he tries hard to keep investment money in solid, blue-chip companies. “I’ve made some money and I’ve lost some, but I’m in it for the long haul,” he said.

Unbound enthusiasm

Norris Purdy, a 10-year employee in the U. of I. Library’s shipping and receiving division, is known for his knack for creative writing – as much as the quality work he performs. Purdy, a recent recipient of the Chancellor’s Distinguished Staff Award, is responsible for receiving, sorting and delivery of books and materials throughout the University Library system. “We get to see some pretty rare things,” he said.

Keyhole Factory: An end-of-days foray where Earth gets the final say

By Mike Helenthal
Assistant Editor

A nyone who subscribes to the science of popular culture has been led to believe apocalyptic post-apocalyptic world will be overrun with plodding zombies intent on feasting on brains.

William Gillespie, an award-winning author and communications coordinator for the UI’s School of Molecular and Cellular Biology, is more scientifically likely and even scarier end-of-days scenario in his new book, “Keyhole Factory.”

“Keyhole Factory” is a cautionary tale: the entire work of fiction – unless you count the billions of people sleepwalking in ignorance while Earth begins to carry out its catastrophic (to most of us) global cleansing process. “There’s not a zombie in the entire work – unless you count the billions of people sleepwalking in ignorance while Earth begins to carry out its catastrophic global cleansing process,” he said.

The author’s foray into the inconceivable world will be telling of the story. Gillespie, who has pseudonyms. In his latest work, he uses traditional literary form but adds flourishes of alternate type arrangement and inserts pattern and presentation techniques designed to aid in the telling of the story.

John Gillespie, who has also been credited as a co-author of the world’s longest literary inef-fanimate, said in a recent interview with Higher Ed, that, like science experimenting with writing calls for certain controls to make it effective.

“One experiment in art demands rig- or,” he said. “It’s not just getting drunk and banging your head against the keyboard. You follow a meticulous procedure and you observe the result.”

Gillespie holds three creative writing degrees and leads an independent publish-ing house, Spineless Books, which features his work, as well as collaborations under-taken with other authors. He and his wife, Crisy, also have hosted what he characterizes as “eccentric” radio shows. He said he started as a psychology major but couldn’t put his pen down long enough to study pre-med.

“I’ve been told the book is dark, even dystopian,” Gillespie said, “but one of the characters is Earth, the beleaguered ecosystem, for whom the demise of humankind is cause and effect. He parlays his scientific knowledge and inserts pattern and presentation techniques designed to aid in the telling of the story. Gillespie, who has also been credited as a co-author of the world’s longest literary inanimate, said in a recent interview with Higher Ed, that, like science experimenting with writing calls for certain controls to make it effective. “An experiment in art demands rig- or,” he said. “It’s not just getting drunk and banging your head against the keyboard. You follow a meticulous procedure and you observe the result.”

“Keyhole Factory,” published by Count-erpunkt/Sofl Book in Berkeley, Calif., is Gillespie’s 10th book of fiction or poetry, many of them using experimental techni ques, and six of them written under five pseudonyms. In his latest work, he uses traditional literary form but adds flourishes of alternate type arrangement and inserts pattern and presentation techniques designed to aid in the telling of the story.

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Gillespie’s work, including “Keyhole Factory,” is online at spinelessbooks.com.

Public hearing to discuss proposed classification changes

By Mike Helenthal
Assistant Editor

T he Council of Academic Professionals approved the agenda listing items to speak against new rules being considered by the State Universities Civil Service System that would limit the U. of I.’s ability to classify its employees.

As it stands, the university can exempt some positions from civil service classifications when they call for specific skills or circumstances are required for a specific job. If the new rules are passed, the exemption power would fall under SUCCS auspices. SUCCS is hosting a public hearing on the proposed changes 1-4 p.m. Jan 3 at its headquarters at 1717 Philo Road, Suite 24, Urbana. A final decision could be rendered by Jan. 30.

CAP Chairman Yfantis Konstantinos told members of the Senate Executive Committee Dec. 10 that U. of I. administrators, as well as administrators from universities from around the state, are being urged to arg ue against the rule changes.

“I think there’s going to be a long line of people wanting to speak,” he said.

The Urbana Academic Senate recently approved an SEC-written statement that says exemption authority should remain at the campus level. “We believe that such a development would harm the institution by requiring that a third party assume responsibility for determining which positions are exempt,” the Senate said.

CAP officials said they were “disap pointed” with the audit process conducted at the Urbana campus after SUCCS reported 122 of 200 investigated positions should be reclassified.
The dark side of kerosene lamps: High black carbon emissions

By Liz Ahlberg

Physicists, engineers and health scientists are aware that black carbon, or soot, is a serious environmental issue. But in developing countries, this form of pollution is often the result of small, simple actions, such as lighting a kerosene lamp.

The Centers for Disease Control and Prevention, the National Institute of Environmental Health Sciences, the U.S. Agency for International Development and the Environmental Protection Agency supported this research.

SURVIVORS, CONTINUED FROM PAGE 1

Victims had enjoyed before the disaster aided in their post-disaster coping and psychological recovery, according to a recent study of Japanese tsunami survivors. The study, which was Kono’s thesis adviser.

While prior studies have explored the psychological benefits that rebuilding new homes and visiting family members can provide, the study found that the ability to engage in leisure activities and develop new friendships can also be therapeutic.

In Japan, where the 2011 tsunami struck, the ability to continue participating in leisure activities was severely constrained by the loss of homes and businesses. However, many survivors were able to resume their pre-tsunami leisure activities and develop new friendships, according to Kono’s study.

Leisure activities An elderly tsunami survivor looks over the vegetables she is growing outside her room in temporary housing in Minamisanriku, Japan.

Health hazard Simple kerosene lamps, a common source of light in the developing world, emit high levels of black carbon — 20 times more than previously thought, according to a new study.

Kerosene lamps release 20 times more black carbon than previously thought, say researchers at the University of Illinois and the University of California at Berkeley. The group published its findings in the journal Environmental Science and Technology.

Black carbon is a hazard for human health and the environment, affecting air quality both indoors and out. It has a major impact on climate as it absorbs heat and reduces warming the air. Although it only lingers in the atmosphere for about two weeks, one kilogram of black carbon can cause major atmospheric black carbon emissions from lamps. For example, LED lamps charged by solar panels are becoming more popular. But an even easier fix would be to place a glass shield around the lamp, which reduces — though does not eliminate — the amount of black carbon particles that escape.

Unlike cooking stoves, which also are very important health hazards but challenging to replace, people actually like to replace the kerosene lamps,” Bond said.

“When it comes to lamps, nobody says, ‘I really like this tin can that I filled with kerosene.’ It’s a plausible, inexpensive way to reduce climate warming immediately, which is something we haven’t really had in the black carbon field before.”

The study authors hope that, with the new data in hand, agencies working in developing countries will implement lamp-replacement initiatives to develop and distribute affordable alternatives.

“Getting rid of kerosene lamps may seem like a small, inconsequential step to take,” said study lead author Nicholas Lam, a UC Berkeley graduate student, “but when considering the collective impact of hundreds of millions of households, it’s a simple move that affects the planet.”

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New online tool helps identify alien ant invaders

By Chelsey Coombs
News Bureau Intern

Researchers have created an interactive website, called Antkey, which includes more than 1,150 images and 70 video clips to help users determine an ant’s identity from more than 100 invasive and commonly introduced global species.

According to the U.S. Chamber of Commerce, $1 billion in cross-border commerce between the United States and Mexico takes place each day. And as goods flow into the U.S., pests can hitch a ride, setting up house and harming the agricultural economy.

The U.S. Department of Agriculture inspects cross-border commerce for pests. If an ant infestation is detected, the current protocol calls for sending a sample to the U.S. Entomological Collection in Washington, D.C., where curators decide if the ants pose a threat.

The process takes time and costs money, but the economic costs are high if items carrying known pests cross into the U.S. Andy Suarez, a U. of I. professor of entomology and of animal biology, developed Antkey with postdoctoral researcher Eli Sarnat. Their goal was to help non-specialists to identify alien ant invaders.

"In the future, by incorporating more resources like video and pictures and making the key simpler, in theory, anyone who is an enthusiast or a concerned farmer or homeowner can actually figure out what all the ants that might be infesting their property are," Suarez said.

Ant guide Professor Andy Suarez is a co-creator of the Antkey website, pictured behind him, which makes ant identification easier for non-specialists.

PROTEINS THAT WORK AT DNA ENDS COULD PROVIDE CANCER INSIGHT

By Liz Ahlberg
Physical Sciences Editor

New insights into a protein complex that regulates the very tips of chromosomes could improve methods for anti-cancer drugs.

Led by bioengineering professor Su Kyung Myong, the research group has had its findings published in the journal Structure.

"Cancer researchers want to get a hold on this problem, control this indefinite lengthening of the telomeres," said Myong, who also is affiliated with the Institute for Genomic Biology at the U. of I. "A lot of the anti-cancer drugs are targeted directly to these telomeres so that they can inhibit telomerase activity. The proteins we study regulate the activity of telomerase." Using a technique developed at Illinois that allows researchers to watch single molecules interact in real time, Myong’s group determined how two proteins called POT-1 and TTP-1 bind to telomeres. POT-1 protects the fragile telomere ends from being attacked by other regulatory proteins that might mistake the end for a broken or damaged area of DNA. When POT-1 and TTP-1 work together in a complex, they promote telomerase activity, an interesting target for cancer researchers.

The group found that on its own, POT-1 binds to the folded-up telomere in distinct steps at particular points in the telomere’s DNA sequence, unfolding the telomere in a stepwise manner. However, the POT-1/TTP-1 complex surprised the researchers by binding, then freely sliding back and forth along the telomere end.

"Instead of stepwise binding, what we saw was a mobile protein complex, a dynamic sliding motion," Myong said. "Somehow it was as if the static binding activity of POT-1 is completely lost – the protein complex just slid back and forth. We were able to reproduce the data and confirm it with many different tail lengths of the telomeric DNA and we know now that the contact between POT-1 and the telomere is somehow altered when the partner protein comes and binds." Next, the researchers will add telomerase and see how the sliding activity of the POT-1/TTP-1 complex affects telomerase activity. Myong postulates that the sliding may promote telomerase activity – and thus telomere lengthening – by making the end of the telomere accessible for the telomerase enzyme to bind.

"We are excited about the possibility that this kind of mobility can increase the telomerase extension activity," Myong said. "It’s somehow engaging the enzyme so that it can stay bound to the DNA longer. So it must involve a direct interaction." Ultimately, understanding the POT-1/TTP-1 complex gives drug developers a new target for anti-cancer drugs, and the assay Myong’s group used to monitor the complex could offer a venue for evaluating telomere-targeting drugs.

"We want to extend our basic science knowledge in telomere biology into causes of cancer and we hope that our assay can be useful for telomere-targeted drug screening," Myong said.

The American Cancer Society and the Human Frontier Science Research Program supported this work. ▶
Swanlund Chair recipients announced

By Jeff Unger
News Bureau

Five professors at the U. of I. have been named Swanlund Chairs, the highest endowed titles on the Urbana campus.

The new Swanlund Chairs are Eric Freyfogle, law; Sharon Hammes-Schiffer, chemistry; Thomas Huang, electrical and computer engineering; John Rogers, materials science and engineering; Stephen Sligar, biochemistry.

“I congratulate our five new Swanlund Chairs,” said Phyllis M. Wise, the chancellor of the Urbana campus. “Their contributions in teaching, discovery and engagement continue to push the boundaries of what we know and how we use that knowledge to make a better world. The global reputation for excellence enjoyed by the University of Illinois at Urbana-Champaign is apparent in the work and dedication of our faculty, students and staff. These five distinguished members of our faculty raise the expectations and the aspirations of all of us in the Illinois family.”

Freyfogle’s work is broadly interdisciplinary – drawing upon history, philosophy, biological sciences, economics and literature – and is guided by a conservation ethic that seeks better ways for humans to live in nature. He is a prolific writer on ecology and conservation issues, and is widely considered an international expert on environmental policies and land conservation. Widely considered an international expert on environmental issues, Sligar also is a fellow of the American Association for the Advancement of Science.

This year’s five new chairs join 10 other scholars (see list) who are current Swanlund Chairs. The program was made possible by a gift from alumnus Maybelle Leland Swanlund. Swanlund, who received a degree in library studies from Illinois in 1932 and who died in 1993, provided a $12 million endowment for chairs to attract leaders in the arts and sciences at the university and recognize current faculty members who have made exceptional contributions in their fields. The awards are for five years and may be renewed.

Current Swanlund Endowed Chairs

Tamer Basar, electrical and computer engineering
May Berenbaum, entomology
Leon Dash, journalism
Eric Freyfogle*, law
Nigel Goldenfeld, physics
Laura Greene, physics
Sharon Hammes-Schiffer*, chemistry
Frederick Hosie, history
Thomas Huang*, electrical and computer engineering
Arthur Kramer, psychology
Gene Robinson, entomology
John Rogers*, materials science and engineering
Klaus Schulten, physics
Stephen Sligar*, biochemistry
Daniel Sullivan, theatre

* indicates 2012 recipient

Thomas Huang, electrical and computer engineering

Eric Freyfogle, law

Stephen Sligar, biochemistry

John Rogers, materials science and engineering

Sharon Hammes-Schiffer, chemistry

To a wide range of experimentally relevant systems. Her research has important implications for protein engineering and drug design, and for the interpretation of experimental results in this field. She was elected a member of the American Academy of Arts and Sciences in 2012, and is a fellow of the American Physical Society and of the American Chemical Society.

Huang has spent his career making major contributions to human-centered computing in general and to image processing/computer vision in particular. Huang’s work has enabled modern computing to evolve to its current state and will enable its continued evolution. Because of his work, there are now a seemingly endless number of ways to capture, store and share images. He has contributed more than anyone else to the technical underpinning of current international fax, image and video-compression standards. Huang was elected to the National Academy of Engineering in 2001 and has won national and international awards. Rogers’ groundbreaking research on flexible formats for electronic devices has transformed the way the world thinks about electronics manufacturing, devices for solar-energy conversion, and the interfaces between electronics and biology. His research includes fundamental and applied aspects of nano and molecular scale fabrication as well as materials and patterning techniques for unusual electronic and photonic devices, with an emphasis on bio-integrated and bio-inspired systems. Two major start-up companies have evolved from his work (MC10 and Semprisa). A member of the National Academy of Engineering, Rogers was named a MacArthur Fellow (2009), won the Lemelson-MIT Prize in 2011 and was chosen by Nature magazine as one of “Ten People Who Mattered in 2012.” He is the author of more than 350 journal articles.

Sligar revolutionized mammalian gene expression and mutagenesis by creating novel synthetic genes for bacterial expression. He invented “nanodisc” device technology to isolate, characterize and deliver membrane proteins. He has made pioneering and seminal contributions to metalloprotein biochemistry and biophysics, including cytochrome P450s, hemoglobin, myoglobin, and electron transfer proteins. Sligar is the author of more than 325 published articles and has a long record of internationally recognized scholarship, cross-campus service, outstanding teaching and visionary leadership. The director of the School of Chemical Sciences from 1994 to 1997, Sligar also is a fellow of the American Association for the Advancement of Science.

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For gardening or wildlife enthusiasts

Can’t tell a short-tailed shrew from a pygmy shrew? Bat guano from deer scat? Beaver dam from a rock? How to plant a native garden? "Creating Habitats and Homes for Illinois Wildlife," (listing more than 200 pages of color photos) by expert information on land scientists and laymen. This book is now in its 10th edition. Anyone can identify an oak tree, as well as cedars, hackberries, 20 different kinds of Illinois oaks, and many other questions – plus team histories, player profiles and season statistics – are contained in the densely packed 100- to 200-page team "Record Books," produced annually by the Division of Intercollegiate Athletics. Books are available for each season of baseball, basketball, football and softball at a cost of $15 for football and men’s basketball record books, $10 for all others. Team schedule posters as well as single-game posters for basketball, football, and volleyball are available for $3. ($3 order form online at http://go.illinois.edu/DIA_order)

The Illinois State Geological Survey drilled down more than a century of earth science investigations to compile "Geology of Illinois," a summary suitable for both rock scientists and laymen. This 530-page book contains more than 200 color photos, maps and drawings to illustrate how the state’s subterranean geology affects life on the surface and vice versa. ($35/Prairie Research Institute)

"Picturing Illinois: Twentieth Century Postcard Art From Chicago to Cairo" would thrill any nostalgia buff, or young fan of vintage images. Written by John A. Jakle, a professor emeritus of geography, and Keith A. Sculle, the head of research and education for the Illinois Historic Preservation Agency, this 200-page book was published this year by the U. of I. Press, and is available for $32.95 at the Illinois Union Bookstore, Holiday Market at Lincoln Square, www.press.illinois.edu and other online retailers. For the littlest geek (or the oldest non-geek) on your gift list, the National Center for Supercomputing Applications has produced its third "NCSA coloring book," "Now With Petapowders," with simple captions that explain computing concepts, such as her. "Researchers use supercomputers to simulate the folding and unfolding of proteins in an effort to understand diseases." A popular give-away at conferences and seminars, the coloring book is available free of charge at the NCSA reception desk or email Tricia Barker, tlbarker@illinois.edu.

The U. of I.’s 4-H Foundation has compiled its best recipes and kitchen advice into a slim, spiral-bound cookbook called "Favorite Recipes of Illinois 4-H Through the Years." It shows the novice cook the basics of kneading bread, cooking fresh vegetables and making white sauce, and includes 4-H classics such as campfire recipes, Stir-Up mix, molded cottage cheese salad, cornflake macaroons, and Funny Cake (made without a bowl). ($12/online at n4h.illinois.edu)

Here’s another Uni High gargoyle. This ceramic one, just 3 inches tall, is inscribed with "UNI" on its base. ($10/Uni High)

In 1970, a U. of I. professor hoping to challenge his students launched what has become a phenomenally popular sport for future civil engineers – concrete canoe racing. In anticipation of hosting the national championships at Illinois this spring, the U. of I. civil engineering department has reproduced T-shirts made by the first canoe crew, which whipped Purdue University (the only other concrete canoe team) in 1971. ($12 online at my.cee.illinois.edu/buy)

Contribute to room and board wavers for current students and get an authentic piece of your lawn, just in case you forgot your junior high geometry formulas. ($3/Prairie Research Institute)

For that hard-to-buy-for person …

GIFTS, CONTINUED FROM PAGE 1
Six professors at Illinois named 2012 AAAS fellows

By Chelsey Coombs
News Bureau intern

Six faculty members at the U. of I. have been named 2012 fellows of the American Association for the Advancement of Science: animal biology professor Chi-Hing Christina Cheng, animal biology professor Neal Cohen, computer engineering professor Kent Choquette, psychology professor Neil Cohen, chemistry professor So Hirata, and anthropology professor Lisa Lucero and physics professor Philip Phillips.

Election as a fellow is an honor bestowed upon members of the association by their peers. This year’s class of AAAS fellows reflects the diversity of fields in which Illinois shines,” said Phyllis M. Wise, the chancellor of the Urbana campus. “From anthropology, psychology and the animal biology to engineering, chemistry and physics, our faculty members are clearly recognized as leaders in their disciplines, as researchers and as educators.”

Cheng was selected for her “distinguished contributions to the field of molecular evolution, focusing on molecular mechanisms that lead to high levels of novel genes and adaptive protein functions under environmental extremes.”

Choquette, an Abel Bliss Professor of Engineering, was honored for his “distinguished contributions to the science and technology of semiconductor vertical cavity surface emitting lasers.”

Cohen, a researcher at the Beckman Institute, was recognized for his “pioneering research on memory and amnesia, distinguishing brain systems and psychological characteristics that distinguish declarative and procedural memory.”

Hirata was selected for “distinguished contributions to the development and implementation of electronic and vibrational many-body theories with periodic boundary conditions to predict the properties of matter in condensed state.”

Lucero was honored for “distinguished service in the field of archaeology, with emphasis on the technology of water management in Maya society and its contemporary implications.”

Phillips was chosen for “distinguished contributions to theoretical condensed matter physics, including the developments of the random dimer model and the concept of ‘Mottness.’”

The election of AAAS fellows began in 1874. This year’s fellows will be recognized during the AAAS annual meeting in Boston in February. AAAS, which publishes the journal Science, was founded in 1848; it is the world’s largest general scientific society.

Experts have been conjuring frightening images — everything from electricity and Internet outages to malfunctioning nuclear power plants — to dramatize what could happen if a cyberattack were to succeed. Is this hyperbole, or a pre-9/11 moment that we need to prepare ourselves for?

This is something that we need to prepare for, but it is difficult to anticipate the potential scope of future attacks. Yes, cyberattacks could be used to sabotage cyberinfrastructures, electrical systems or wastewater treatment networks safe from cyberattacks. Is this the way to go, or do we need a catastrophic attack to get people’s attention to the vulnerabilities our digital systems face from hackers and spies? We are facing a situation where it would benefit us to be forward-looking, but public demand for these programs likely will remain stagnant or hostile to government funding.

A Minute With ...™ Archives

Recent interviews with U. of I. experts:


■ Thomas Schmidt, expert on science and public policy: “Using science as evidence in setting government policies.” Nov. 12, 2012

■ Tracy Suskin, expert on legislative politics: “Do candidates’ promises match their deeds when elected?” Oct. 30, 2012

■ Brian Gaines, expert on polling and elections on the Electoral College: “Is that any way to run an election?” Oct. 29, 2012

A Minute With ...™ is provided by the U. of I. News Bureau. To view archived interviews, go to illinois.edu/goto/aminutewith.
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.

**Christopher M. Burns**

**an associate professor of medical microbiology in the College of Medicine**

**Education:** Ph.D. (molecular, cellular and developmental biology), Indiana University; B.S. (microbiology and immunology), McGill University

**Courses Teaching:** BMS 626, Medical Biology. He also will serve as course coordinator for the medical microbiology course.

**Research Interests:** Investigation of RNA turnover in microbes including pathogenic bacteria

“Dr. Burns’ qualifications are on the cutting edge of medical education with both practical and administrative experience in medical school curricular integration and in active learning, both of which are strong current mandates of the national accreditation body for medical schools,” said Uretz Oliphant, the interim regional dean of the College of Medicine. “In addition to his practical experience in both problem-based learning and team-based learning, he has developed materials and trained faculty members and students in these new teaching modalities and his expertise represents a campuswide asset, which could be made available through the campus teaching academies.”

**Why Illinois?** “Vince Lombardi said ‘Individual commitment to a group effort – that is what makes a team work, a company work, a society work, a civilization work.’ ” Burns said, “It is also what makes a university work. This attitude pervades our campus. Illinois students, faculty and staff members are all committed to doing their individual best while working hard to elevate everyone in the university community. This is why I chose Illinois. Together we will do greater things than any of us could do on our own.”

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**Tisha A.M. Harper**

**a clinical assistant professor of veterinary clinical medicine in the College of Veterinary Medicine.**

**Education:** M.S. (veterinary medical sciences), Virginia-Maryland Regional College of Veterinary Medicine; D.V.M. (veterinary medicine), University of the West Indies, St. Augustine, Trinidad West Indies

**Teaching:** Harper, a small-animal surgeon, is board-certified by the American College of Veterinary Surgeons. Her teaching responsibilities include didactic, laboratory and clinical teaching of pre-clinical and clinical DVM students, interns and surgery residents.

**Research Interests:** Orthopedic surgery, including total hip replacement, stifle and elbow diseases, arthroscopy and fracture repair; and rehabilitation therapy for animals that have experienced lameness and other ambulatory disorders.

“Harper will expand our rehabilitation therapy program and develop research projects to investigate the effectiveness of specific rehabilitation therapy modalities,” said Karen Campbell, the head of veterinary clinical medicine. “We look forward to her contributions in teaching enhanced surgical skills to our professional students and surgery residents and in providing exceptional care for our surgical patients.”

**Why Illinois?** “Orthopedic surgery, canine physical therapy and rehabilitation are important components of the postoperative care for orthopedic patients,” Harper said. “The U. of I. Veterinary Hospital has all of the tools I need to advance in these fields. We have a full-time rehabilitation specialist as well as the necessary equipment. We also have the infrastructure necessary to further research in this area.”
Campus users of NetFiles are reminded that Campus Information Technologies and Educational Services will retire the service Dec. 21. NetFiles has served for many years as the campus’s free solution for personal backup, file sharing and Web publishing. NetFiles users will need to move their content by the deadline or they will lose that content.

Free online program
Course on water wells offered

Homeowners in small communities and rural areas without a public water supply often don’t fully understand how to manage, operate and protect their private wells. The Illinois State Water Survey and the Illinois Water Resources Center recently announced a nationwide training initiative funded by the Rural Community Assistance Partnership through a grant from the U.S. Environmental Protection Agency.

The program combines a 10-part online class with live, interactive webinar events. Steve Wilson, a groundwater hydrologist with the Illinois State Water Survey with more than 20 years of experience working with private well owners, will serve as the primary instructor for the course.

The class seeks partners in various sectors to extend the reach of this initiative and connect with private well owners. State agencies, local governments and industry professionals are invited to become a partner and assist with promoting this free service. The course also invites partners to host webinars to answer questions about local issues.

For more information, go to www.privatewellsc.org or contact info@privatewellsc.org for more information.

Division of Management Information
Campus Profile now available

The new version of the Campus Profile is now available on the Web at www.dmi.illinois.edu/cp/.

The Campus Profile is a compilation of indicators for departments and administrative units at Illinois. Totals are included at the school, college, vice chancellor and campus levels. Ten years of data are displayed for most items. Users can view a standard set of items for one unit, or they can select units and items to create a custom report.

Last year original undergraduate admissions data were added. All new students are counted in the original applications count; however, students who were redirected to another college are not counted in either of the colleges’ original admitted or original enrolled counts. The total undergraduate admissions data were also added, which includes applications, admitted and enrolled counts for all new students.

Stromy weather
Cancellation recommendations released

Elyne Cole, the associate provost for human resources, is encouraging employees and managers to be aware of policies governing campus closings in the event of a weather-related emergency.

Cole said normal leave procedures apply when employees are unable to report to work because of the weather. Overtime-eligible civil service employees may apply vacation, floating holiday, accrued compensatory time or approved absence without pay in the event they miss work during inclement weather. The same options are available for over-time exempt civil service employees and academic professional positions, except for using accrued time.

“In general, the university encourages employees to carefully consider their personal safety and local conditions in determining their ability to commute to work in extreme weather conditions,” said a release from Cole’s office.

The operations of some “essential units” are continuous and will not cease, even in the case of bad weather, and many of the units have policies that supersede the university’s general closing guidelines.

Cole said the university as a whole, even with the announcement of class closings, does not close, and that closings by units or departments must be approved by the Office of the Chancellor or Office of the Provost. Answers to frequently asked questions are online: http://go.illinois.edu/weatherFAQ.

E-waste awards announced

Winners of the Illinois Sustainable Technology Center’s 2012 International E-Waste competition were announced during a ceremony Dec. 4.

The competition is organized as a component of the ISTC’s Sustainable Electronics Initiative. ISTC is a division of the Prairie Research Institute.

College students and recent graduates from around the world submitted their ideas for products and services. Nineteen entries from eight countries provided ideas for preventing e-waste generation through life-cycle considerations (E-Waste Prevention category) or that incorporate e-waste components into a new and useful item (E-Waste Reuse category). The competition is designed to prompt dialogue about product designs for environmentally responsible computing and entertainment.

A team of U. of I. students received a silver award for their project, "Fluorescence Microscopy Using A Recycled Paper Scanner." The concept was submitted by Dustin Gallegos, a recent graduate in electrical engineering, and two current Urbana students – Lillian Hislop in biomedical engineering and ZhanHao Xi in general studies.

First place winners received $3,000, second place $2,000, and third place $1,000. A total of $12,000 was awarded, which was funded through contributions. The ceremony was broadcast as a webinar and is available at www.istc.illinois.edu/about/sustainability_seminars.cfm.

University Housing’s dining app now available

University Housing has created a mobile application for its on-campus dining locations. The app, called UI Dining, is available for both iOS and Android devices and provides menus, hours and locations for all University Housing dining halls, specialty restaurant and a la carte locations.

The free app also provides menus for up to two weeks in advance, allowing diners to find their favorite dishes easily.

Filters can be set to display only foods that are vegan, vegetarian or foods that meet other criteria important to customers, such as gluten-free.

Administrative Information Technology Services and University Housing staff members created the app, which is available for download at the iTunes App Store and on Google Play.
A better bet? Wagering on teams coming off a bye week

By Shanta Forrest

There is no simple wagering strategy for professional football — as always picking the home team or the underdog is going to pay off in the long run. Don’t bet on it, say sports economists Scott Tainsky and Yoon Tae Sung.

Their analysis of National Football League game outcomes and betting strategies — such as picking the favorite, the underdog, the home team or the road team, or combinations of these factors — suggests that although these tactics may be successful over short periods of time, such as a single season, the average bettor is unlikely to profit in the long run.

The sole exception may be betting on teams coming off a bye week, especially if the team is the favorite and is playing a road game.

Tainsky and Sung analyzed all regular season games from the NFL’s 2002-2009 seasons to explore the efficiency of the sports betting market and whether simple wagering strategies could beat the market over time. Specifically, the researchers wanted to examine whether odds makers and bettors were attuned to any potential advantage posed by teams that were returning to play after a bye week, or a week off from competition.

Several psychological studies have shown that time off and vacations have positive effects on workers’ performance, so, theoretically, football teams could have an edge over their opponents after a bye week, said Tainsky, a professor of recreation, sport and tourism in the College of Applied Health Sciences at the University of Illinois at Urbana-Champaign. “In the latest collective bargaining agreement, players are guaranteed at least five consecutive days off during their bye week, a clear recognition by management and players that teams benefit from rest. If the betting market is fair, bookmakers and bettors’ probabilities of winning bets on these teams should reflect that,” he said.

Across all eight seasons studied, bettors who used the simple strategy of picking the home team would have won only 48 percent of their bets, the researchers found. However, after teams’ ‘bye weeks, betting probability of winning improved considerably, especially if they bet on teams that were the favorites and were playing away games.

“Away favorites’ cover percentage was a little over 73 percent,” Tainsky said. “But when both teams were coming off a bye, the favorites won 59 percent of bets — and bettors and bookmakers’ probability of winning bets on these teams should reflect that.”

Although, theoretically, all teams should benefit from extended rest periods, better teams usually seemed to benefit more, exceeding expectations after bye weeks. However, underdog teams playing at home covered the point spread during only 45 percent of their post-bye week games, despite indications by previous researchers that setting on home underdogs yielded positive returns.

Tainsky and Sung speculated that road teams’ performances may be enhanced by the collective experience of shared travel, contrasting with commonly held beliefs that teams have an unmitigated advantage when playing at home and are disadvantaged when on the road.

The researchers explored several possible explanations for the post-bye week pattern, in particular whether bookmakers’ forecasting and point spreads were in error, or that the effect might be limited to certain point spreads, but did not find any evidence to support that.

Since none of the other simple betting strategies would have enabled bettors to beat the market over the eight-year period studied, the researchers concluded that the NFL betting market appears to be efficient overall. However, bookmakers and bettors may be unable to outmaneuver the phenomenon of bye weeks on teams’ performance, if the patterns found in the study persist.

“It would have been — and it may still be — possible for bettors to beat the market if they put their money on the away favorites coming off a bye,” Tainsky said. “But further investigation is needed to determine if this finding is specific to the league or to the sport.”

The study was published online Nov. 23 in advance of publication in the Journal of Sports Economics. Sung earned his master’s degree at Illinois and is pursuing his doctorate at Florida State University.

Betting on ‘bye’ An eight-year analysis of the National Football League wagering market conducted by researchers Scott Tainsky, left, and Yoon Tae Sung suggests that teams that are the favorites in a road game may have unrecognized potential when they’re coming off their bye weeks. Tainsky is a professor of recreation, sport and tourism in the College of Applied Health Sciences, and Sung was a graduate student at the time of the study.

photo by L. Brian Stauffer

Inside Illinois
Cellphone animations provide ag, health education worldwide

By Diana Yates
Life Sciences Editor

They’re watching them in Benin, Brazil, Burkina Faso, Ethiopia, India and Niger. They’re learning how to stop the spread of dengue, malaria, tuberculosis, cholera and food-related illness. They’re learning how to protect their crops from insect damage or post-harvest losses. And they’re coming up with new ideas for similar lessons to share with their neighbors or others around the world.

Many people in developing countries have cellphones that allow them to watch videos and play interactive games. Now agricultural researchers and health educators are using this technology to help those in the developing world address some of the most challenging issues they face. The initiative, Scientific Animations Without Borders, delivers educational materials in the form of narrated, animated videos to a global audience, and – perhaps most remarkably – hears back from that audience on ways it can improve its message or add to its repertoire of videos.

Organized by faculty and staff members at the U. of I. working in collaboration with the Center for African Studies as well as international students and animators, SAWBO offers videos on more than a dozen subjects of importance to global health and agriculture, and the list is growing.

“Our focus is providing new education- al content as fast as possible dealing with crop or health problems,” said Illinois entomology professor Barry Pittendrigh, who founded SAWBO with Julia Bello-Bravo, an assistant director of Illinois Strategic International Partnerships; graduate students Laura Steele and Alice Vrachtes; and research specialist Susan Bajie.

A primary focus is the prevention of “post-harvest losses,” the waste of food crops as a result of insect infestations, spillage or spoilage. New videos, on how to avoid losing grain during bag or bulk transport, for example, are funded through the ADM Institute for the Prevention of Post-harvest Loss at Illinois.

“It is generally believed that about one-third of the world’s agricultural production doesn’t reach its intended use because of food losses and waste along the food supply chain,” said Steve Sonka, the director of the Institute for the Prevention of Postharvest Loss and a professor emeritus of agricultural strategy at Illinois. “Lack of effective training capabilities in developing nations contributes to that loss, and we believe that the SAWBO approach has tremendous promise in providing such training where it can be effectively employed.”

Future videos will address other threats to agricultural products, showing people, for example, how to make and use clay vessels that extend the shelf life of fruits, vegetables and other perishable goods. And health-related videos tackle the spread of infectious diseases with easy-to-follow, step-by-step explanations and instructions.

“They are people who don’t know that malaria is produced by the mosquito bite,” Bello-Bravo said. “The videos teach them this basic fact, as well as the different measures they can take to prevent malaria. Getting this knowledge out to people who might otherwise not have access to it can really have a positive impact on their lives.”

New subject matter will include lessons on how to use readily available materials to build sustainable devices, such as a solar oven to cook without wood.

The animations are done in a variety of styles, from realistic, three-dimensional modeling of people, objects and insects to simple 2-D cartoons, Seufferheld said. Some students in media studies and fine arts at have contributed to the effort. Other videos are produced by professional animators.

The team also is branching out to develop applications for cellphones and tablet computers.

International students at Illinois provide many of the narrations. SAWBO currently has videos in Yoruba and Igbo (Nigeria); Castilian Spanish; Wolof (Senegal); French (Haiti, Benin and elsewhere); English with a U.S., Indian or Nigerian accent; Amharic (Ethiopia); pidgin (Ethiopia and Nigeria); and Hindi, Tamil and Kannada (India).

The team works to ensure that every video is scientifically accurate, Pittendrigh said, using only information that has been proven in field trials or scientific studies. For example, most of the health and safety recommendations are based on those of the World Health Organization, he said.

The distribution of videos also is a critical issue, Pittendrigh said.

“Our goal is to be a centralized place where people can get materials and deploy them locally,” he said. “We also have developed an online system that allows local educators to download and use the videos in the deployment strategies that they think are best in their local environment.”

ON THE WEB http://sawbo.illinois.edu