Street crimes unit provides another tool in fighting crime

By Mike Helenthal
Assistant Editor

The U. of I. Police Department has created a versatile street crimes unit it hopes will stop crimes in progress or – with investigative pluck and a little luck – before they occur.

“This is something we’ve wanted to start for some time but we didn’t have the resources to make it happen,” said Capt. Roy Acree. “Now we have the staffing and the unit is already making an impact.”

The idea behind the special two-officer unit is to allow the department to more directly target enforcement efforts to whatever the daily need is. The officers normally will work overnight hours, but will have the flexibility to work anytime depending on the activities. The officers will work both plain clothes and uniform details.

Acree said the word “hybrid” is the most apt description, but whatever you call it, the street crimes unit is expected to give the department the flexibility to better police large events, assist the narcotics unit in interdicting campus-based drug traffic or work on criminal investigations that may take months to complete.

“They’re going to be doing a little bit of everything – whatever the day calls for,” he said. “We looked for officers who would be street savvy and who like getting out and talking to people and interacting with anybody. To be successful, they will have to be proactive.”

The street crimes unit began its work this semester and the effort already has been successful. On Feb. 2, the unit responded to a complaint that officers say had set up a veritable roadside illicit drug stand in the parking garage of the Krannert Center for the Performing Arts.

“IT was a big haul for us and a great way to start things off,” said Lt. Steven Trame, who leads the unit. “We wanted to get the unit up and running before the good weather breaks so we would already have a sense of how we would be operating.”

The night shift The new street crimes unit of the U. of I. Police Department will spend most of its time working late-night hours and with a plainclothes approach to fighting crime on campus. The versatile unit will be utilized by the department to target specific areas or crimes.

Restoration of Alma Mater to be more extensive than planned

Because deterioration to the Alma Mater sculpture is more extensive than an initial inspection of the exterior indicated, the restoration of the 5-ton bronze statue is going to cost more and take longer.

The 83-year-old campus landmark, which had been at the southeast corner of Green and Wright streets in Urbana, was removed Aug. 7, 2012, and taken to the Conservation of Sculpture and Objects Studio in Forest Park, Ill., to repair years of water damage and corrosion that affected the appearance and structural integrity of the sculpture.

Once experts were able to closely inspect the interior of the 13-foot tall artwork by U. of I. alumnus and artist Lorado Taft, they determined the 30 sections that make up the sculpture had oxidized and corroded. The interior of each piece will be cleaned, repaired and treated in the same way as the exterior. Lasers are being used to remove the oxidation, returning it to its original bronze color, and then the metal will be sealed with a wax compound, which will be reapplied periodically.

“IT was a big haul for us and a great way to start things off,” said Lt. Steven Trame, who leads the unit. “We wanted to get the unit up and running before the good weather breaks so we would already have a sense of how we would be operating.”

He said the spring and summer will present the best test for how effective the unit can be, as the warm weather tends to brings more people – including criminals – out and about.

Improving teaching

This year’s Distinguished Teacher/Scholar will focus on improving teaching in large general education classes.

Heart disease

Professor’s research contradicts commonly held beliefs about the role of dietary cholesterol.

Hands-on approach Above, a worker at the Conservation of Sculpture and Objects Studio, based in Forest Park, Ill., concentrates his cleaning efforts on labor – the sculpture on the left behind Alma Mater. (Laboring is shown at right.) Further study of the statue revealed that interior damage was worse than first thought, which will lead to a higher repair cost and keep the statute from returning to its Green and Wright streets pedestal in time for graduation. At left, the worker uses a laser tool to remove years of oxidation damage on the statue.

In this issue

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Chancellor updates senators on ‘Visioning’ initiative

By Mike Helenthal
Assistant Editor

T he data-collection stage of the Visioning Future Excellence initiative has wrapped up, and the data is ready to be reported out.

She said she has received a list of recommendations from the six Visioning Future Excellence committees that are charged with developing ideas within an assigned theme that could serve as a strategy for the university in the next 20 to 50 years.

She was also prepared to update the Senate on the next steps. The final recommendations from each of the committees will be ready to report their findings. Those sessions, with another 2,000 representing an array of campus interests, are expected to publish the final recommendations in about two weeks.

U of I chancellor, philanthropist to speak at commencement

By Mike Helenthal
Assistant Editor

As expected, the University of Illinois alumnus, philanthropist, will be the speaker because his life’s story exemplifies the U of I mission: to provide a world-class education, to develop and disseminate knowledge, and to serve and lead the public.

His entrepreneurial spirit turned an idea for public affairs, said the university’s School of Art and Design is working to create several replicas of the sculpture, which will be placed around campus for unique photo opportunities.

“Each replica will have a little differ- ent personality,” she said. “We’ll post a map and we’ll color-coordinate the campus website so students can easily find them and get pictures with one or all of the sculptures.”

She said there also are plans to place orange and blue bunting in front of Foellinger Auditorium and to add landscape- ing to the campus to create several graduation photo opportunities in the absence of the Alma Mater statue.

Robin Kaler, the associate chancellor for public affairs, said the university’s Visioning Future initiative will be delivered to campus at an April town hall meeting.

“We will outline what we’ve learned and what we’ve heard,” she said.

The chancellor also took a moment to comment on Unofficial St. Patrick’s Day, which has been marked by past years as a place to consume all manner of drunken behavior leading to classroom dis- ruptions.

“I’m pretty pleased to report we had no major disruptions and no classes were canceled,” she said of the March 1 event.

She credited the efforts of several admin- istrators in ensuring the unit and College of Liberal Arts and Sciences, which has been working since October to create a carbon-neutral campus by 2050.

“Even though we haven’t been able to shut this activity down, we have been able to control it,” she said.

In senate business, senators voted to fill a faculty and student vacancy on the Committee on Committees. The final recommendations from the six Visioning Future Excellence committees will be ready to be reported out in about two weeks.

Champaign and Urbana police departments have operated similar units that have been successful, and that the addition of the U of I unit will further strengthen the already cooperative rela- tionship among the departments.

The unit still is officially classified as a special response unit, and should never forget that campus crimes can be dangerous if they don’t take precautions and aren’t aware of their sur- rounding attitudes at all times.

“There’s a big difference between be- ing on the Quad at 3 a.m. and being on the Quad at 3 p.m.,” he said. “There are many things you can do to make yourself less vulnerable.”

Although the unit has been in place for nearly a year, the Quad is empty and is traditionally a campus crime trend that’s occurring and we can respond to a variety of circumstances,” Trame said. “We’re not tied to shift-re- lated activities.

He said drug enforcement will be a major focus because of the tendril-like nature of drug-related crime.

“Sometimes these crimes go hand in hand,” he said. “A lot of the people involved in drugs are committing other crimes as well. The unit will be going to where the people are and they’ll be out looking for suspicious behavior.”

Acree said the unit still is officially operating on a trial basis and the concern is that if the recent arrests are any indication of future success, it could become permanent. He said the Champaign and Urbana police departments have operated similar units that have been successful, and the addition of the U of I unit will further strengthen the already cooperative relationship among the departments.

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Chief Executives Organization, a global
On the Job

Jerry Dinnin

By Mike Helenthal
Assistant Editor

I t was not always easy for Diener to con- contribute to the basic science of psychology. “This award honors … work (that) has had a profound impact on the field of psychology over the past quarter century,” said Joseph Steinmetz, the president of the association. Recipients of this award represent “the absolute best our science has to offer,” he said.

In 2012, Diener was elected to the American Academy of Arts and Sciences, and the American Psychological Association presented him with its Distinguished Scientific Contribution Award. Diener earned his bachelor’s degree in psychology at California State University at Fresno. He earned his doctorate, specializing in personality psychology, at the University of Washington. He joined the Illinois faculty in 1974 and is an emeritus professor. Diener’s scholarly work largely focuses on the concept of happiness and its influence on the field of psychology. In 2008, a book he co-wrote with his son, Robert Biswas-Diener, “Happiness: Unlocking the Mysteries of Psychological Wealth,” won the Professional and Scholarly Publishing Prose Award for Excellence in Psychology. It was not always easy for Diener to conduct his research on happiness, an obstacle he hopes that current researchers will no longer have to overcome.

“… This is why the awards are important to me. They make my work more visible, and our scientific understanding can rapidly move forward.”

Diener said that he hopes his accomplishments will inspire researchers to continue studying happiness. “Young researchers will see studying well-being as a respectable topic, and not be afraid to enter the field,” he said. “… This is why the awards are important to me. They make my work more visible, and this makes it likely that other scientists, especially young ones entering the field, will follow up and revise, extend, and correct my findings.”

The real satisfaction for Diener is not the awards themselves, but what he did to earn them. “As nice as awards are, the real reward is still doing the research – I love it,” he said. “It is so wonderful to receive recognition for doing what you love.”

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

Ed Diener receives lifetime achievement award

By Madeline Ley
News Bureau Intern

Ed Diener, the Joseph R. Smiley Distinguished Professor of Psychology at the U. of I., is a 2013 recipient of the William James Lifetime Achievement Award for basic research, presented by the Association for Psychological Science. The award “honors APS members for their lifetime of significant intellectual contributions to the basic science of psychology.”

“Their work (that) has had a profound impact on the field of psychology over the past quarter century,” said Joseph Steinmetz, the president of the association. Recipients of this award represent “the absolute best our science has to offer,” he said.

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Lifetime achievement Ed Diener, the Joseph R. Smiley Distinguished Professor of Psychology, is a 2013 recipient of the William James Lifetime Achievement Award for basic research, presented by the Association for Psychological Science.

Order from chaos Jerry Dinnin, service order supervisor for Facilities and Services, says the first word of his title – service – allows the other parts to fall into place. A former phone salesman, Dinnin said making the customer happy is always his first priority.

A while, some of it becomes second nature.”

After work, you’re likely to find Dinnin and his two boys, ages 10 and 15, plotting gridiron strategies or practicing with the youth football league in Rantoul, where the family resides. He’s a coach and has played the game most of his life.

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Faculty research focuses on undergraduate research

By Mike Helenthal

The university’s renewed emphasis on offering undergraduate students more research opportunities was highlighted Feb. 22 at the annual Faculty Retreat on Teaching and Learning at the Illini Union. The event was organized by the Center for Teaching Excellence and co-sponsored by the Office of the Provost and Online and Continuing Education.

“It’s a very exciting time for undergraduate education – there is a tremendous amount of opportunity and research universities already have a huge advantage,” Allison Snow, a professor in Ohio State University’s department of evolution, ecology and organismal biology, said prior to the meeting.

Snow is the founding director of the OSU Undergraduate Research Office and was the retreat’s keynote speaker.

“There’s a surge of interest nationwide,” she said. “Research universities have been putting more resources into undergraduate programs, research opportunities and services on campus,” she said. “It gives students another reason to come to your university and it enhances the overall educational experience. It’s not something a student can get online.”

Among the growing resources on the U. of I. campus is the new Office of Undergraduate Research, started this year under the direction of Paul D. Dieth, a political science professor.

Dieth told retreat participants that his office, while new, is working to stimulate the growth of undergraduate research opportunities across campus.

Part of the challenge, he said, is defining exactly what research is and how the concept can be applied across varied curriculums.

“It means very different things and it varies by discipline,” he said.

While research traditionally is defined as a student who contributes original intellectual or creative content to a specific discipline, Dieth said that definition may turn out to be too broad for the purposes of offering general undergraduate research opportunities more widely.

He said a more holistic and broadly applicable definition would include “research that is new to the student, not the discipline.”

Dieth’s office is surveying 125 campus units to determine the kinds of research opportunities already being offered to undergraduates. He said he hopes his office can serve as a conduit for students seeking their own ways to expand research opportunities.

“There are a lot of units who are doing a lot for undergraduates,” he said. “There is room for optimism, but lots of room for improvement.”

He said student interest in conducting research is high, evidenced by the more than 300 presentations given at last year’s undergraduate research symposium on the Urbana campus.

Snow said during her presentation that having a central office is important in promoting programs such as the symposium, which attracted more than 700 students at OSU last year, and in developing broader campus strategies, expanding research opportunities and improving the overall undergraduate experience.

“Research opportunities are not something that can be offered to every undergraduate because we have a limited amount of faculty,” she said. “But many times, students don’t even know the opportunity exists. There’s a perception that the undergraduates are not getting enough attention. The needs and ambitions of our students compel us to be creative in meeting these challenges.”

She said research could be defined as simply “inquiry-based learning” – that which is conducted outside normal class work and directed toward solving a practical problem. The retreat featured speakers, workshops and a poster session, all centered on seeding undergraduate research across disciplines.

Research revisited

Allison Snow, the founding director of Ohio State University’s Undergraduate Research Office, told attendees of the annual U. of I. Faculty Retreat on Teaching and Learning that the concept of research can be defined as simply “inquiry-based learning” – that which is conducted outside normal class work and directed toward solving a practical problem. The retreat featured speakers, workshops and a poster session, all centered on seeding undergraduate research across disciplines.

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Micale to focus on improving teaching in large-hall lectures

By Mike Helenthal
Assistant Editor

For the students sitting in the back row of Foellinger Auditorium, history professor Mark Micale feels your pain.

But it’s not so painless behind the lectern either, says Micale, who has been teaching History 142/Western Civilization in the cavernous lecture hall since he arrived at the U. of I. in 1999. At up to 380 students, it’s among the largest general education classes on campus.

“Taking over a class that size was a completely new experience,” he said. “Suddenly I had a microphone and nine teaching assistants – but there just wasn’t any guidance about how to tackle a course that huge.”

This year’s Distinguished Teacher Scholar, Micale will use his title to address the challenges professors face in trying to connect the front of the general education classroom to the back.

“I’m generalizing my predicament and addressing it as a universitywide challenge,” he said.

Back then, Micale developed ways to make his course more interesting and accessible to the hundreds of students taking it.

Now, backed by that experience and perennially high marks from students for his attention-holding presentations, he has embarked on a research project for his attention-holding presentations, perennially high marks from students taking it.

Instead of dwelling on what’s wrong with general education classes, we’re going to look for the striking exceptions to the rule.”

“My goals are specific and targeted,” he said. “There is very little official training that keeps us on our toes as teachers, and there have been no campus resources directed specifically toward teachers to help improve their teaching in 100-level general education classes.”

If Micale is successful, the stigma of the sometimes ill-attended and often disrespected “blow-off” class could be lifted for student and professor alike.

Micale already has assembled a 25-member team of “all-star” large-class professors from across the U. of I. campus whom he selected using classroom statistics, the Chancellor’s Senior Survey rankings and other measurements including “extensive undergraduate hearsay.” These “master Gen Ed instructors” will spend the next year comparing notes and experiences through a series of meetings with Micale that he will videotape.

Instead of dwelling on what’s wrong with general education classes, we’re going to look for the striking exceptions to the rule,” he said. “There are a handful of these instructors across campus who have been brilliantly successful. I’m getting them together and asking them, ‘What are you doing that explains your unique success in this teaching format?’

—Mark Micale

Micale plans to post the instructor interviews on a website of “Best Teaching Practices,” giving everyone on campus an opportunity to share their insights. He’s also starting up a regular meeting of a cohort of general education teachers to address instructional challenges and forge new relationships.

“There are over 800 listed Gen Ed courses at the U. of I. and we can’t just write these courses off as a pedagogical wasteland,” he said. “We don’t have to be circus entertainers, but students in this setting need something distinctive to keep them engaged and serious. My hope is that this will be a consciousness-raising exercise that can be applicable to all teaching. I’d like to try to isolate that winning formula.”

The Distinguished Teacher-Scholar Program award, which is sponsored by the Office of the Provost, includes a stipend for expenses related to the project and for office assistance. None of the money may be used for faculty salaries, though the recipient is granted extra time to work on the project. The title is permanent.

The objective of the program is to offer talented faculty members not only recognition, but also the opportunity to engage in an in-depth analysis of the craft and art of teaching,” says information on the provost’s website.

Class warfare

Mark Micale, this year’s Distinguished Teacher/Scholar plans in the next year to study what techniques work best in large general education classroom settings by interviewing the most successful professors of such classes on campus. He hopes to produce a guide for teachers looking for proven classroom strategies.

To view job postings, apply for civil service or academic jobs at Illinois, or to update your application information:

@Illinois

jobs.illinois.edu
Online video
http://go.illinois.edu/VetMouseTrap

Cats and dogs with abdominal or airway obstructions often couldn’t be scanned previously because of the risks posed by general anesthesia or because the breathing tubes used during anesthesia interfered with viewing the larynx and associated disease.

“X-rays are extremely poor at detecting disease of the larynx,” O’Brien said. “And laryngeal disease has never been imaged with CT before – ever – because of the risks posed by general anesthesia or because we never could look at how the larynx was functioning when there was a breathing tube in the larynx – but we can see laryngeal disease now very nicely on awake cats. Our latest research tells us that not only can we detect lung disease now, we can tell whether they have constrictive heart failure. And that’s just been a critical change in our evaluation.”

A typical scan takes about seven seconds, and with several minutes for prepping and positioning the VetMouseTrap™ – with the pet inside – on the CT table, the procedure is over within 10 minutes, without stress to the patient or additional handling or restraint. “Instead of being placed in an oxygen-supportive environment and given medications that may or may not be appropriate as we wait for the cat to become stable, which could take 24-96 hours, we’re now doing CTs within the hour that the cat arrives,” O’Brien said. “If we find that the problem’s heart, we can start heart meds right away – literally without disconnecting and reconnecting the breathing tube in the larynx – but if the problem is outside the larynx...”

Better view
The VetMouseTrap™, a restraint device developed by veterinary radiologist Robert T. O’Brien, is enabling clinicians to conduct CT scans on patients that couldn’t be scanned previously, leading to faster diagnosis and treatment of life-threatening conditions.

“’We’ve just never been able to CT this group of patients before because they have so much trouble breathing, and they’re so dependent on their oxygen therapy,” O’Brien said.

Ports in each end of the VetMouseTrap™ accommodate oxygen lines and intravenous catheters so patients can remain on oxygen or IV therapy while undergoing scans, and clinicians need not disconnect and reconnect the CT SCANS.
Study reveals stem cells in a human parasite

By Diane Yates
Life Sciences Editor

From the point of view of its ultimate (human) host, the parasitic flatworm *Schistosoma mansoni* has a gruesome way of life. It hatches in feces-tainted water, grows into a larva in the body of a snail and then burrows through human skin to take up residence in the veins. Once there, it grows into an adult, mates and, if it’s female, starts laying eggs. It can remain in the body for decades.

A new study offers insight into the cellular operations that give this flatworm its extraordinary staying power. The researchers, from the U. of I., demonstrated for the first time that *S. mansoni* harbors adult, non-sexual stem cells that can migrate to various parts of its body and replenish tissues. Their report appears in the journal *Nature*.

According to the World Health Organization, more than 230 million people live in need of treatment for *Schistosoma* infections every year. Most live in impoverished areas with little or no access to clean water. Infection with the worm (also known as a blood fluke) can lead to damaging inflammation that may lead to death.

Every year, however, *S. mansoni* afflicts millions of people around the world, most in impoverished areas without access to clean water.

Children are especially vulnerable to the effects of infection, in some cases experiencing delays in growth and brain development as a result of chronic inflammation brought on by the parasites.

In a collaborative project with postdoctoral researcher James J. Collins III, the researchers discovered that *Schistosoma mansoni* renews its tissues with stem cells. “Whereas worms usually renew their tissues by mitotic cell division, it’s quite a different story for the parasites,” Collins said. “Most worms cause disease by breeding in the body of their host, whereas these parasites grow and develop in the host’s body and then move to different body sites, and it may also open up new avenues for research.”

“The female lays eggs more or less continuously, on the order of hundreds of eggs per day,” said U. of I. cell and developmental biology professor and Howard Hughes Medical Institute Investigator Phillip Newmark, who led the study with postdoctoral researcher Phillip Newmark, said. “They divide to make more stem cells and they give rise to cells that can differentiate. Collins had labeled the cells with fluorescent markers. This allowed him to watch how they behaved. He noted that over the course of a few days, some of the labeled cells migrated into the gut or muscle, to become part of those tissues.

“We label the cells when they’re born and then we see what they grow up to become,” Collins said. “This is not conclusive evidence that these cells are equivalent to the planarian neoblasts, but it is consistent with the hypothesis that they are.”

The researchers went deeper, determining which genes were turned on or off, up or down in the proliferating cells as compared with the non-dividing cells. They identified a gene in the proliferating cells that coded for a growth factor receptor very similar to one found in planarians. When the researchers switched off the parasite’s ability to make use of this gene using a technique called RNA interference in worms grown in the lab, the proliferating cells gradually died out.

“We postulated that these cells are important for the longevity of the parasite,” Collins said. “Now we can start asking which genes regulate these cells.”

“Instead of having to piece-meal the information — use one modality to look at their heads, take X-rays to look at their chest and perform ultrasound to look at their abdomens, which takes a lot of time and manhandling for all these different tests — we can do a tip of their nose to tip of their tail in about 15 seconds, even on a fairly large dog,” O’Brien said.

Several articles about O’Brien’s research projects have appeared in the journal *Veterinary Radiology* and *Ultrasound*, most recently in the November/December 2012 issue.

CT SCANS, CONTINUED FROM PAGE 6

lines when inserting or removing patients from the device.

In a collaborative project with scholars in Pretoria, South Africa, O’Brien is investigating CT’s efficacy as a comprehensive diagnostic tool for trauma patients, such as pets that have sustained multiple injuries after being struck by cars or attacked by other animals. “Instead of having to piece-meal the information — use one modality to look at their heads, take X-rays to look at their chest and perform ultrasound to look at their abdomens, which takes a lot of time and manhandling for all these different tests — we can do a
Research: Bankruptcy judges influenced by apologies

By Phil Ciciora
Business and Law Editor

Research by legal and psychological scholars has shown that apologies can result in better outcomes for wrongdoers in a number of legal contexts, especially when the party perceived as the victim receives the apology. But new research conducted by a pair of U. of I. law professors examines the influence of apologies on a different kind of legal decision – the decision of a bankruptcy judge to approve a debtor’s proposed repayment plan.

Debtors who apologized were seen as more remorseful and were expected to manage their finances more carefully in the future compared to debtors who did not offer an apology, according to a study co-written by Jennifer K. Robbennolt and Robert M. Lawless, professors of law at Illinois. Robbennolt also is a professor of psychology.

“There is a fair amount of evidence that apologies can be beneficial in a variety of legal contexts – for example, in criminal law and in tort law,” Robbennolt said. “We found that apologies have effects on judges in bankruptcy cases that are similar to the effects that apologies have on individuals in those other legal contexts.”

In the study, a pool of federal bankruptcy judges was presented with a hypothetical scenario where a married couple with two children asked the judge to approve (or “confirm,” in bankruptcy parlance) a proposed debt repayment plan under Chapter 13 of the bankruptcy code. Judges were presented with a version of the facts in which the couple either did or did not offer an apology.

“When our respondent judges believed that the debtor was more remorseful, they were more likely to approve the debtor’s repayment plan in bankruptcy,” Robbennolt said.

The scholars say the research expands the examination of apologies to a legal setting where there is no clear victim, presenting a different context for how apologies operate.

“We didn’t know much about how apologies might operate in the context of bankruptcy,” Robbennolt said. “Bankruptcy is different from many other areas of law because the harm is often spread across many creditors, so there is no single victim. In addition, the debtor initiates the case, so the filing of a bankruptcy petition itself may be perceived as an acceptance of responsibility by the harm-doer, as a way of ‘owning up’ to an unmanageable financial condition.”

Those characteristics of bankruptcy cases could dampen any effect of an apology. But judges who thought that the debtors felt remorse were more likely to confirm the debtors’ proposed repayment plan, according to the study.

“Judges were more likely to think that the debtors had taken responsibility for their financial situation, felt more remorse and were better able to manage their finances going forward when they apologized,” Robbennolt said.

The paper’s findings have practical implications for bankruptcy lawyers, the authors say.

“Our findings suggest that bankruptcy is, at least in part, about forgiveness, and that expectations about the rehabilitation of the debtor or play a role in bankruptcy decision-making,” Robbennolt said. “Attorneys should pay attention to the ways that their bankruptcy clients can demonstrate remorse, whether that is through a formal apology or other opportunities for acknowledgment of responsibility and honest disclosure.”

The study also has policy implications for the consumer bankruptcy system. While apologies are not part of the formal law of bankruptcy, they seemingly made a difference for judges, Robbennolt said. “The Bankruptcy Code directs judges to take into account whether the debtor will likely successfully complete the proposed repayment plan over a period of years, and remorse seems to appropriately influence those predictions.”

At the same time, apologies also influenced judges’ assessment of whether certain discretionary expenses were “reasonably necessary,” an influence that is not contemplated by the law, Robbennolt says.

“In our hypothetical scenario, the apology did not directly affect how judges perceived the various expenses of the debtors,” she said. “Judges’ perception of the debtors’ remorse, however, was related to how they viewed a claimed expense for their daughters’ gymnastics fees, which were the most discretionary of the debtor’s proposed expenses in our fictional narrative. And, perceptions of those fees turned out to have the largest effect on judges’ confirmation decision.”

Lawless, who also co-directs the Illinois Program on Law, Behavior and Social Science, which promotes interdisciplinary research and teaching at the intersection of law and the social sciences, says the study serves to remind bankruptcy judges and lawyers that borrowing and debt still have moral aspects, even in today’s heavily commercialized credit markets.

“While the law still matters, our findings suggest, perhaps not surprisingly, that judges’ decisions can be complex and multidimensional.”

—Jennifer K. Robbennolt

When our respondent judges believed that the debtor was more remorseful, they were more likely to approve the debtor’s repayment plan in bankruptcy.

—Jennifer K. Robbennolt
He is the editor in chief for the Society for Industrial and Applied Mathematics’ Journal on Optimization, is a SIAM Fellow and was awarded the 2012 George B. Danzig Prize.

University YMCA

Soulforce director to speak March 8

The Rev. Cindi Love, the executive director of Soulforce, will speak on “Fundamentalism, Freedom and Faith” at noon March 8 at the University YMCA’s Laffer Hall.

The talk will focus on the challenges faced by marginalized communities, which are often subjected to exclusion.

Soulforce is a national nonprofit organization dedicated to bringing freedom to lesbian, gay, bisexual, transgender and queer people from religious and political oppression. To bringing freedom to lesbian, gay, bisexual, transgender and queer people from religious and political oppression.

March 19-20

Microscopy workshop being offered

On March 19 and 20, three core facilities at the U. of I. are sponsoring an Advanced Microscopy Workshop with the purpose of exploring new Colinear and nonlinear contrast strategies in light, laser and fluorescence microscopy for use in biological and materials analysis. The unique interdisciplinary forum, offered by the Frederick Seitz Materials Research Laboratory, the Beckman Institute for Advanced Science and Technology, the Institute for Genomic Biology and Imaging @ Illinois, will feature morning lectures paired with laboratory-centered “breakout” sessions in the afternoons.

For more information and to register, visit: www.mrl.illinois.edu/microscopy/2013.

Operations Research

‘Big Data’ featured in March 27 lecture

Since the origins of operations research in the mid-20th century, researchers have sought to address major global issues through mathematical analysis and optimization. Since 2005, data has become both massive and valuable, offering new opportunities to researchers and practitioners. The talk will be in the auditorium of the Frederick Seitz Materials Research Laboratory, the Beckman Institute for Advanced Science and Technology, the Institute for Genomic Biology and Imaging @ Illinois, will feature morning lectures paired with laboratory-centered “breakout” sessions in the afternoons.

For more information and to register, visit: www.mrl.illinois.edu/microscopy/2013.

Open houses galore

There’s a lot going on this weekend. A summary of the open houses this weekend, addresses, their hours of operation and websites for more information:

**Beckman Institute Open House**

9 a.m. to 4 p.m. March 9

Beckman Institute

405 N. Mathews Ave., Urbana

beckman.illinois.edu/events/open-house

**Blue Waters Supercomputer**

Self-guided tours

9 a.m. to 3 p.m. March 9

National Petrascale Computing Facility

1725 S. Oak St., Champaign

www.ncsa.illinois.edu/AboutUs/Facilities/eh.html

**Engineering Open House**

9 a.m. to 4 p.m. March 8

9 a.m. to 3 p.m. March 9

Engineering Campus

ehc.illinois.edu

**ExploreACES**

College of Agricultural, Consumer and Environmental Sciences

9 a.m. to 3 p.m. March 8

10 a.m. to 2 p.m. March 9

ACES Campus

expolraces.org

**Naturally Illinois Expo**

Prairie Research Institute

9 a.m. to 3 p.m. March 8

10 a.m. to 3 p.m. March 9

Natural Resources Building

607 E. Peabody Drive, Champaign

prairie.illinois.edu/expo

**No trespassing**

Public asked to avoid research sites

The area near the corner of Race and Windsor, west of Meadowbrook Park in Urbana, may appear to be an inviting recreational area, researchers at the U. of I. would like to remind people that the Illini Forest Plantations are off limits to the public and their pets for safety and liability reasons.

“The Illini Forest Plantations function as an outdoor laboratory and experimental forest for U. of I. researchers and student research in the college of natural resources and environmental sciences in the College of Agricultural, Consumer and Environmental Sciences,” said Jay Hayek, a U. of I. Extension forestry specialist. “But what was once a thriving experimental forest plantation has now become a refuge of invasive plant species brought in by mammals, birds, and even people and their pets.”

Hayek and his students with the Illini Foresters student club are initiating an aggressive invasive species removal program that includes the use of herbicides, loppers, chainsaws and other mechanical equipment.

“Obviously, a small experimental forest with ongoing
invasive species removal and herbicide use is not a safe way to exercise, bike or walk your dog,” Hayek said.

Hayek said that he hopes the public and pet owners will instead use the public facilities and paths across the street at Meadowbrook Park.

The Illini Forest Plantations are not a newly restricted area; no trespassing signs have been posted at the entrances for a number of years. Because the U. of I. Police recently discovered that trespassers had erected an elaborate wood fort at the site and there has been theft of firewood, the university is asking the public and pet owners to respect the university’s policy on trespassing at its research sites.

Wellness Center

Program helps manage chronic disease

Participants of the Live Well, Be Well chronic-diseases self-management program will learn a healthy way to live with chronic conditions, such as arthritis, heart disease, asthma, lung disease, diabetes or osteoporosis.

The program will help participants overcome frustration, fight pain and fatigue, reduce stress, make daily tasks easier, and aid in making informed decisions.

This proven program is open to any Illinois employee with a chronic long-term condition as well as caregivers, spouses and partners.

Participants meet from 5:15-7:15 p.m. Thursdays for seven weeks beginning March 28 at the UI Wellness Center. The cost is $60. (Employees who attend at least five sessions can get a $20 refund.)

For more information or to register, go to ui-wellness@illinois.edu or call 217-265-9355.

Survey Research Laboratory

Free survey research seminars offered

The UIC Survey Research Laboratory is offering four introductory seminars on survey research methodology this semester. The series is free to U. of I. faculty and staff members and students. Attendance for each seminar is limited and advance registration is required.

Participants may register for more than one seminar. The seminars will be from noon to 1 p.m. in Room 201 at 505 E. Green St., Champaign, and will be led by senior staff members.

Registration is online only at www.srl.uic.edu/SEMINARS/Spring13minars.htm. Notes for individual seminars will be available from the lab’s website just prior to each seminar. Copies will not be provided at the seminar. A basic understanding of survey research methods is recommended as a prerequisite. A description of each seminar is available online.

The seminars offered this spring: “Introduction to Survey Sampling” (April 2), “Introduction to Questionnaire Design” (April 9), “Introduction to Web Surveys” (April 16) and “Introduction to Survey Data Analysis” (April 23).

University YMCA/Cosmopolitan Club/ISSS

International event features food, music

The University YMCA, Cosmopolitan Club and the International Student and Scholar Services will host the 30th annual International Dinner and Performance Night on March 10.

Families, international students and faculty members come together for an evening of great food and live music. Tickets are $10 for a sampling of food and music from all over the world. Anyone may attend.

The event will feature dishes from Africa, Bangladesh, France, Greece, Israel, Myanmar, Peru, Poland, Romania, Sri Lanka and Ukraine.

Headlined by local Indian rock a cappella group Chai-Town, performances will be offered by several intercultural groups.

The event is from 6 to 8 p.m. at the University YMCA’s Latzer Hall. Seats are limited; tickets can be purchased at the University YMCA.

For more information and updates on the menu and performance schedule, visit www.universityymca.org/international/dinner/

Federal budget sequestration

Website provides funding updates

In 2011, the Budget Control Act, which called for developing a plan to reduce federal spending, was signed into law. Because such an agreement has not been reached, mandated across-the-board budget cuts are now in effect. Federal funding agencies such as the National Science Foundation, the National Institutes of Health, the Department of Energy and others are included in this budget sequester. On this campus, cuts to scientific research could amount to as much as $36 million in the first year alone.

The U. of I.’s Governmental Relations staff in Washington, D.C., has been monitoring legislative action on sequestration. While detailed plans are still being prepared, many federal funding agencies are looking at plans that include delaying solicitations, funding fewer awards or extending programs. There are few specifics at this time, but the Office of the Vice Chancellor for Research has developed a website to provide information as it becomes available. The site, located at http://go.illinois.edu/budget_sequestration, will provide current news from federal funding agencies and links to information about the implications of the budget cuts.

According to the site, the Office of the Vice Chancellor for Research, the Office of Sponsored Programs and Research Administration, and the Office of Grants and Contracts will share pertinent information relating to current and pending grants with the associate deans for research and institute directors.

Faculty members are asked to keep Grants and Contracts, OSPRPA, and college and unit business staff members informed of specific information received on specific grants.

Engineering Open House

‘Imagine the Impossible’ March 8–9

‘Imagine the Impossible’ is the theme for the 93rd annual Engineering Open House on March 8-9. In addition to more than 250 exhibits ranging from concrete crushing to Newtonian fluid demonstrations, this year’s open house offers a few special attractions, including an elaborate residence hall room fire demonstration by the Champaign Fire Department; a talk by Phil Plait, the host of the Discovery Channel’s “Bad Universe” and a writer for Slate Magazine; a Tesla Coils Concert that will light up the Grainger Quad on Friday night.

All events and exhibits are free and open to the public. The annual showcase of student projects and engineering marvels runs from 9 a.m. to 4 p.m. March 8 and from 9 a.m. to 3 p.m. March 9 on the Engineering Campus.

This event, which attracts about 20,000 visitors each year, is organized and run by students from the Engineering Council at Illinois. Both interactive and informative, the event is a fun learning experience for the whole family. A free mobile phone app – created by Lextra Global Services especially for the open house that includes exhibit details, building information, maps and more – can be downloaded from the event website, http://eoh.ce.illinois.edu.

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from 10 a.m. to 2 p.m. March 9. The Beckman Café will serve breakfast and lunch both days.

ExplorACES is March 8-9

The Beckman Open House, held every two years in conjunction with Engineering Open House, will be March 8-9. More than 30 exhibits will highlight the work at Beckman, one of the nation’s leading centers for interdisciplinary research.

One of the many displays will feature Bert, the childlike iCub robot, who is designed to mimic a human child in order to gain insight into human psychology and neurophysiological development, as well as areas such as computer science, robotics and even philosophy.

Visitors will have the opportunity to fly a quadcopter by using neural signals from their arm muscles, demonstrating the amazing things that can be done by using electrical signals generated in the brain.

High-resolution microscopes from the Beckman Microscopy Suite will allow visitors to see stunning images of small-scale matter. The Illinois Simulator Laboratory showcases the intersection of art and technology in artist Lisa Frank’s 3-D photography through a virtual world display. The Marine Biology Lab will feature clownfish, which are capable of changing their gender. Beckman’s other facilities – the Imaging Technology Group and the Biomedical Imaging Center – will showcase their efforts as well.

The event will run 9 a.m. to 4 p.m. March 8 and 9 a.m. to 3 p.m. March 9. The Beckman Café will serve breakfast and lunch both days.

For more information, visit http://beckman.illinois.edu/events/open-house.

College of ACES

ExplorACES is March 8-9

The U. of I. College of Agricultural, Consumer and Environmental Sciences is giving potential students an opportunity to ExploreACES from 9 a.m. to 3 p.m. March 8 and from 10 a.m. to 2 p.m. March 9.

More than 2,000 students are expected to attend the two-day, student-run event that acquaints prospective and admitted ACES students with the college’s faculty members, curriculum and selection of student organizations and opportunities. Information will be available on study- abroad programs, potential careers and how students can apply for nearly $2 million in scholarships.

Prospective students will get a glimpse of what the college has to offer with more than 125 exhibits showcasing academic, research and student development. A reception for admitted students will complete Saturday’s activities at the Student Dining and Residential Programs Building.

“ExplorACES is the ultimate opportunity to learn more about the college, especially if you are a soon-to-be high school graduate or transfer student interested in finishing a bachelor’s degree,” said Jason Emmert, the ACES assistant dean of academic programs.

Although prospective and admitted students are the target audience for the event, parents also are encouraged to attend.

“ExplorACES is really about providing students and their families the opportunity to understand what ACES has to offer. Deciding where to attend college is one of the most important choices students will ever make, and it is incredibly helpful for prospective students to see the campus, talk to faculty and staff (members), and perhaps most importantly, connect with current ACES students,” Emmert said.

Free parking, with shuttle service to both ExplorACES and Engineering Open House, is available on Friday in lot E-14, just west of Assembly Hall. On Saturday, visitors may park in the parking garage at the corner of Gregory and Dorner Drive in Urbana.

For more information about the event, visit www.exploraces.org.

ExperienceAHS

AHS open house is March 9

The College of Applied Health Sciences will open its doors from 9 a.m.-3 p.m. March 9 at George Huff Hall.

ExperienceAHS will showcase the many opportunities within the college, offering a glimpse of what students experience in the classroom and in the field. Opportunities are available for current or prospective students to visit departmental labs, see research exhibits, attend undergraduate information sessions with academic advisers, and learn about student organizations within the college.

Programs of study: community health; interdisciplinary health (iHealth); kinesiology; recreation, sport and tourism; and speech and hearing science.

For more information, go to www.ahs.illinois.edu/experienceAHS/.
Lipid researcher, 98, reports on the causes of heart disease

By Diana Yates
Life Science Editor

A 98-year-old researcher argues that, contrary to decades of clinical assumptions and advice to patients, dietary cholesterol is good for your heart – unless that cholesterol is unnaturally oxidized (by frying foods in reused oil, eating lots of polyunsaturated fats or smoking).

The researcher, Fred Kummerow, an emeritus professor of comparative biosciences at the U. of I., has spent more than six decades studying the dietary factors that contribute to heart disease. In a new paper in the American Journal of Cardiovascular Disease, he reviews the research on lipid metabolism and heart disease with a focus on the consumption of oxidized cholesterol – in his view a primary contributor to heart disease.

“Oxidized lipids contribute to heart disease both by increasing deposition of calcium on the arterial wall, a major hallmark of atherosclerosis, and by interrupting blood flow, a major contributor to heart attack and sudden death,” he wrote in the review.

Over his 60-plus-year career, Kummerow has painstakingly collected and analyzed the findings that together reveal the underlying mechanisms linking oxidized cholesterol (and trans fats) to heart disease.

Many of Kummerow’s insights come from his relentless focus on the physical and biochemical changes that occur in the arteries of people with heart disease. For example, he has worked with surgeons to retrieve and examine the arteries of people suffering from heart disease, and has compared his findings with those obtained in animal experiments.

He and his colleagues first reported in 2001 that the arteries of people who had had bypass operations contained elevated levels of sphingomyelin (SFING-oh-my-uh-lin), one of several phospholipids (phosphate-containing lipids) that make up the membranes of all cells. The bypass patients also had significantly more oxidized cholesterols (oxysterols) in their plasma and tissues than people who had not been diagnosed with heart disease.

Human cells incubated with the blood plasma of the cardiac patients also picked up significantly more calcium from the culture medium than cells incubated in the plasma of healthy patients. When the researchers added oxysterols to the healthy plasma, the proportion of sphingomyelin in the cells increased, as did the uptake of calcium.

Earlier research, including studies conducted by medical pioneer Michael DeBakey, noted that the most problematic plaques in patients with heart disease occurred at the branch-points of the arteries of the heart. Kummerow followed up on these reports by looking at the phospholipid content of the arterial walls in pigs and humans. He found (and reported in 1994) that the branch points of the arteries in humans and in swine also had significantly more sphingomyelin than other regions of the same arteries.

For Kummerow, the increase in sphingomyelin was a prime suspect in the blocked and calcified arteries of the cardiac patients. He had already found that the arteries of the newborn human placenta contained only about 10 percent sphingomyelin and 50 percent phosphatidylcholine (FOSS-fuh-tih-dyl-COH-lean), another important phospholipid component of cell membranes.

“But when we looked at the arteries of people who had had bypass operations, we found up to 40 percent sphingomyelin and about 27 percent phosphatidylcholine,” Kummerow said. “It took us many more years to discover that when you added large amounts of oxysterols to the cells, then the phosphatidylcholine changed to sphingomyelin.”

Further evidence supported sphingomyelin’s starring role in atherosclerosis. When Kummerow and his colleagues compared the blocked and unblocked arteries of patients needing second bypass operations, they found that the arteries with blockages contained twice as much sphingomyelin as the unblocked arteries. The calcium content of the blocked arteries (6.345 parts per million) was also much higher than that of the unblocked arteries (182 ppm). Other studies had demonstrated a link between increases in sphingomyelin and the deposit of calcium in the coronary arteries. The mechanism by which this occurred was unclear, however. Kummerow’s team searched the literature and found a 1967 study that showed that in the presence of certain salts (in the blood, for example), lipids like sphingomyelin develop a negative charge. This explains the attraction of the positively charged calcium to the arterial wall when high amounts of sphingomyelin are present, Kummerow said.

“So there was a negative charge on the wall of this artery, and it attracted calcium from the blood until it calcified the whole artery,” he said.

Oxidized fats contribute to heart disease (and sudden death from heart attacks) in an additional way, Kummerow said. He and his collaborators found that when the low-density lipoprotein (LDL, the so-called “bad cholesterol”) is oxidized, it increases the synthesis of a blood-clotting agent, called thromboxane, in the platelets.

If someone eats a diet rich in oxysterols and trans fats and also smokes, he or she is endangering the heart in three distinct ways, Kummerow said. The oxysterols enhance calcification of the arteries and promote the synthesis of a clotting agent. And the trans fats and cigarette smoke interfere with the production of a compound, prostacyclin, which normally keeps the blood fluid.

“Oxidized fats cause 600,000 deaths in this country each year,” Kummerow said.

Kummerow is the author of “Cholesterol Won’t Kill You, But Trans Fats Could.”