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Welcome

For nearly a century and a half, the University of Illinois has been an incubator of progress.

Innovation born on our campuses is ingrained in our daily lives, from pioneering technology that helps us live better to medical breakthroughs that help us live longer. Our graduates – more than 19,000 every year – emerge as leaders who guide our nation’s unending push for an even better tomorrow.

As we build for the future, our world-class academic and research programs also support prosperity today, pumping $13 million into the Illinois economy every year and creating more than 150,000 jobs.

In this report, you’ll get a slice of the latest initiatives at the University of Illinois, which will soon add to our rich legacy of excellence in teaching, research and service to our state and our nation.

We hope you enjoy it, and thank you for your support of this great university.
The total operating budget* for the University of Illinois is $5.01 billion.

*Includes $793.3 million in payments made on behalf of the University for employee benefits and $34.1 million for the Academic Facilities Maintenance Fund Assessment (AFMFA).

Where does the money come from?

<table>
<thead>
<tr>
<th>Source</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Tuition and Fees</td>
<td>19.4%</td>
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<tr>
<td>State Revenues</td>
<td>13.9%</td>
</tr>
<tr>
<td>State Payments on Behalf</td>
<td>15.8%</td>
</tr>
<tr>
<td>US Grants and Contracts/ Federal Appropriations</td>
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</tr>
<tr>
<td>Earnings, misc. (e.g., hospital &amp; medical services plans)</td>
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</tr>
<tr>
<td>Auxiliary &amp; Departmental Operations (e.g., bookstores, housing)</td>
<td>12.3%</td>
</tr>
<tr>
<td>Institutional Funds</td>
<td>6.5%</td>
</tr>
<tr>
<td>Private Gifts</td>
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How is the money spent?

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Instructional and Departmental Research</td>
<td>20.2%</td>
</tr>
<tr>
<td>Separately Budgeted Research</td>
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</tr>
<tr>
<td>Hospital Operations</td>
<td>12.4%</td>
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<tr>
<td>Auxiliary and Independent Enterprises</td>
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<tr>
<td>Academic Support</td>
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<tr>
<td>Extension and Public Service</td>
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<tr>
<td>Administration and General</td>
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<tr>
<td>Physical Plant</td>
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<tr>
<td>Student Aid</td>
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<tr>
<td>Student Services</td>
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</table>
The University of Illinois has an impact across the state. Its campuses, educational facilities, hospitals and clinics, research sites, and extension offices make educational, medical, cultural, and economic contributions to communities from Lake Michigan to the hills of Southern Illinois, from towns on the Mississippi bluffs to those adjacent to the fertile farm fields of east-central Illinois. This map shows the reach of the University of Illinois.
The University of Illinois at Urbana-Champaign, established in 1867, is a world leader in research, teaching and public engagement. A premier public research university, the Urbana-Champaign campus is distinguished by the breadth and quality of its programs. Faculty conduct world-class interdisciplinary research and scholarship in an environment that enables creative thinking and promotes academic excellence. Urbana boasts Nobel Laureates, MacArthur Fellows and faculty whose research is among the most cited in their fields.

Total enrollment (Fall 2011)  44,407
Degrees awarded (2010-2011)  11,576
Operating budget (2011-2012)  $1.86 billion
The University of Illinois at Chicago, which is celebrating the 30th anniversary of the union of the east and west campuses in 2012, is an urban university intimately connected to its home in one of the nation’s largest and most diverse cities. A noted research center, particularly in urban affairs, medicine and the health sciences, UIC is committed to creating and disseminating new knowledge. The campus operates the state’s major public medical center. With branches in Peoria, Rockford and Urbana, the College of Medicine educates more physicians than any other university in the nation.

Total enrollment (Fall 2011) 28,091  
Degrees awarded (2010-2011) 6,549  
Operating budget (2011-2012) $2 billion

The University of Illinois at Springfield, located in the state capital, emphasizes a strong liberal arts core, engagement in public affairs, and dedication to community outreach. The campus offers more than 40 degree-granting programs and is a recognized leader in online education. By pairing academic excellence with small class size that offers substantial student-faculty interaction, high-quality programs and internships in public affairs, journalism and government, UIS offers a unique educational experience.

Total enrollment (Fall 2011) 5,137  
Degrees awarded (2010-2011) 1,317  
Operating budget (2011-2012) $82.5 million
The University of Illinois Board of Trustees serves as the final authority of the University. Trustees are responsible to the people of Illinois for the distribution of funds appropriated by the General Assembly and for the administration and governance of the University.

Board members are interested in all aspects of the University. In addition to focusing on appropriate governance, trustees advocate for programs and initiatives that support diversity and sustainability on all three campuses.

Trustees meet every two months and hold positions on various committees including the executive committee; academic and student affairs; audit, finance and facilities; governance, personnel and ethics; and hospital. The board’s three-member executive committee meets to transact urgent business that cannot be postponed to a regularly scheduled board meeting. Trustees also serve on several external boards, including those of the University of Illinois Alumni Association and University of Illinois Foundation; the Illinois Research Park; and IllinoisVENTURES, LLC.

Trustees serve on a voluntary, non-remunerated basis. Three student trustees, one from each campus, are elected by the student body to one year terms; one has a binding vote and two have advisory votes.

**BOARD OF TRUSTEES**
(with year term expires)

<table>
<thead>
<tr>
<th>Name</th>
<th>Campus</th>
<th>Expiration</th>
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<td>Ricardo Estrada</td>
<td>Chicago</td>
<td>2017</td>
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<tr>
<td>Karen A. Hasara</td>
<td>Springfield</td>
<td>2017</td>
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<tr>
<td>Patricia Brown Holmes</td>
<td>Chicago</td>
<td>2017</td>
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<tr>
<td>Christopher G. Kennedy</td>
<td>Kenilworth</td>
<td>2015</td>
</tr>
<tr>
<td>Timothy N. Koritz</td>
<td>Roscoe</td>
<td>2013</td>
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<tr>
<td>Edward L. McMillan</td>
<td>Greenville</td>
<td>2015</td>
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<td>James D. Montgomery</td>
<td>Chicago</td>
<td>2013</td>
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<tr>
<td>Lawrence B. Oliver II</td>
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</tr>
<tr>
<td>Pamela B. Strobel</td>
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**STUDENT TRUSTEES 2011-2012**

<table>
<thead>
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</thead>
<tbody>
<tr>
<td>Hannah Ehrenberg</td>
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<tr>
<td>Kenneth M. Thomas</td>
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<tr>
<td>John W. Tienken</td>
<td>Springfield</td>
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**STUDENT TRUSTEES 2012-2013**

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<th>Name</th>
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<td>David Pileski</td>
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<tr>
<td>John W. Tienken</td>
<td>Springfield</td>
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University Administration
www.uillinois.edu

The University’s senior staff work together to develop strategies and solutions to address educational challenges across the University of Illinois campuses.

University administration provides centralized administrative services that are vital to supporting the primary missions of the institution: instruction, research, public service and economic development.

Staff are responsible for communicating the variety and excellence of research and other academic endeavors occurring at the University of Illinois to government, corporate and civic leaders as well as to alumni and other stakeholders.

UNIVERSITY SERVICES AND FUNCTIONS

Academic affairs
Business and financial services
Ethics administration
Facilities planning
Government relations
Health affairs
Human resources
Information technology and systems
Planning, administration and auditing
Research
Technology and economic development
University counsel
University relations

University of Illinois Foundation
www.uif.uillinois.edu

The University of Illinois Foundation is the official fund raising and private gift-receiving arm of the University of Illinois and the three campuses. UIF staff work with alumni, friends, faculty, corporations and campus development staff to promote opportunities that benefit the University.

The foundation surpassed its $2.25 billion Brilliant Futures fundraising goal in 2011, raising $2.43 billion by the campaign’s end. In June, the university launched Access Illinois: The Presidential Scholarship Initiative, a three-year, $100 million fundraising campaign designed to help ensure that the three campuses continue to attract and retain the best and brightest students, regardless of their financial need.

University of Illinois Alumni Association
www.uiaa.org

Alumni are a permanent part of the University of Illinois family, and their support of University of Illinois and the University of Illinois Alumni Association programs, services and events fosters participation and pride in the institution. The universal membership model expands the reach of the organization and its members. Currently the University has more than 637,000 living alumni.
The Urbana students waded in the Sangamon River to collect water samples, learned about radio telemetry used to track wildlife, evaluated soils, and measured and identified trees. The goal of the day was to showcase the skills used by natural resources scientists and to expose students to a few career options that await them in their chosen discipline.

Each University of Illinois campus has a range of classes that provide hands-on experiences lasting a day, a semester, or for the time required to complete a project. In addition to classes, many students seek out campus jobs that supplement their income while providing valuable work experience and a glimpse of future jobs.

Wenji Guo, a junior in the UIC Honors College majoring in biological sciences, has worked with faculty in medical labs on campus, focusing on cancer and epidemiology research. She delights in discovering new things and calls research “incredibly intellectually rewarding.” Her UIC classes and research positions have cemented her career choice to become a physician and researcher. Guo is one of fewer than 300 recipients across the U.S. of a prestigious Goldwater Scholarship awarded to students in math, science and engineering.

Internships are another avenue for valuable experience. At UIS, for example, the Graduate Public Service Internship program marries a graduate education with a job placement at a participating state of Illinois agency. Students apply the concepts they are learning in their classes to their positions, which can last as long as 21 months.

A 2010 survey by the Association of American Colleges and Universities showed that employers look for recent graduates who have had internships or other hands-on experiences, demonstrating their ability to apply knowledge and skills to the workplace.

Across the three campuses, University of Illinois faculty create learning opportunities for students to put their educational experiences to work.
Symbiotic partnership

Beckwith Residential Support Services at Nugent Hall, on the Urbana-Champaign campus, is helping students with physical disabilities become more independent and empowering them to achieve their career goals. The students, who were once dependent on their families for assistance with everyday activities, are able to attend college away from home because of a unique partnership with personal assistants, other students who live in Nugent Hall and work directly with the disabled and assist with their daily needs. The disabled students hire and set the schedule for their assistants, many of whom are studying for health careers. Beckwith also provides voice-activated technology, lift systems, adjustable beds, laundry facilities and classroom/kitchen space where students with disabilities can acquire the skills needed to live more independently.

Learning in the field and by the river

The Alfred O. and Barbara Cordwell Therkildsen Field Station adjacent to the Illinois River at Emiquon provides students and faculty a unique opportunity for field biology research. UIS faculty and student researchers use the 7,400-acre property owned by The Nature Conservancy to investigate environmental restoration and management strategies, learn about the natural processes of a floodplain and explore animal life. Through use of advanced field instruments, students have measured carbon and nitrogen content of soil and plant samples to learn more about the impact of global warming on the ecosystem. The floodplain restoration at Emiquon represents the first river reclamation effort of its size.

Developing as an art professional

Students in art programs at the University of Illinois begin working on exhibits long before graduation. When preparing an art show, students take on a variety of roles – designing the art to be displayed and possibly critiqued by professionals; curating pieces for themed museum shows; and coordinating the administrative tasks required to plan and execute an exhibit. As students near their graduation dates, many will display their work in a senior art exhibit. Figure One in Champaign, UIC’s Gallery 400 and the Visual Arts Gallery on the UIS campus all display the art and creations of U of I students. The three galleries also expand the Illinois art scene and integrate the university’s art programs with their local communities. UIC biomedical visualization student Annie Campbell completed an illustration on the photoreceptors of the eye (right) for a “Redefining the Medical Artist” exhibit.
Students who want a University of Illinois-quality education without the bricks and mortar experience are in luck. The university offers more than 110 online degree and certificate programs across its three campuses.

U of I Online bills itself as the “one-stop shop” for learning about programs and courses on the three campuses. The comprehensive website (www.online.uillinois.edu) has links to the variety of programs offered, including certificate programs and continuing education classes. Community college students can learn how to earn a bachelor’s degree from the university by following online guide books explaining the credit transfer process.

Dianne Dunn, a 2011 UIS alumna, completed her bachelor’s degree while caring for her ill mother. UIS is a national leader in online education.

“UIS online courses really worked for me. I found the course work to be interesting and challenging,” she said. “The overall experience was great.”

The degree programs are the same accredited education offered on campus, and courses are largely taught by campus faculty.

A variety of formats are used including live and asynchronous instruction. Classes utilize tools such as wikis, blogs and online discussions. Programs attract students from all 50 states and several countries.

More than 28,000 students took University of Illinois classes online in 2011.

INTEGRATING COMPUTER GAMES INTO TEACHING

Reaching children in the classroom requires more technology now than ever before. At least that is the lesson Urbana-Champaign College of Education Professor Wen Hao (David) Huang is teaching future educators.

In an undergraduate course – offered for the first time in the spring of 2012 – Huang showed aspiring teachers how to integrate educational computer games into their everyday instruction. They learned how to create online games that are both fun and engaging – a crucial feature, according to Huang – and help the children achieve defined learning objectives.

Educational games, such as the history-focused Oregon Trail game that was originally released in 1971, have been around for generations. Today’s youngsters, Huang says, spend more time online, both at home and in the classroom, which makes game-based learning an effective instructional tool.

Undergraduates are taught how to develop captivating story lines and associated assignments that help lead the players to develop targeted skills and reach specific educational goals.

“The game design process – for me and the students – is very creative and a very rewarding experience. I tell students, ‘The sky’s the limit,’” Huang said.

Basic programming skills are taught during the course, which reinforces that online games can be developed once the undergraduates are active teachers. After the students complete their games, classroom colleagues evaluate their effectiveness as instructional tools.

In a graduate class on the same subject, students developed a program for teaching third-graders mathematics and one that taught college students the principles of financial management.
COMMUNITY COLLEGE TO UIS: SEAMLESS TRANSITION

Transfer agreements between UIS and Illinois community colleges are making it easier for students to complete a four-year degree.

In 2011, four more community colleges finalized agreements with UIS. The partnerships help students enrolled in accountancy, business administration, economics, management and management information systems programs transfer to Springfield.

Students can transfer seamlessly from the associate degree programs at the community colleges to undergraduate programs at UIS, then complete their bachelor’s degree.

The agreements serve as an “effective ‘road map’” for those who want to earn their degree in a timely manner, said Raymond Barnett, UIS transfer coordinator.

The 2011 transfer agreements were made with Illinois Valley Community College in Oglesby; Lake Land College in Mattoon; Parkland College in Champaign; and Southwestern Illinois College in Belleville. UIS already had transfer agreements in place with Harper College, Heartland Community College, Illinois Central College, Lewis and Clark Community, Lincoln Land Community College, Richland Community College and Rock Valley College.

Barnett says the goal for each of the added agreements is to have five new students a year enroll at UIS from each partnering school.

Graduates of Illinois high schools can also begin college at Parkland College and transfer smoothly to the Urbana campus through the Parkland Pathway to Illinois program. The program guarantees admittance for students who participate. The Urbana campus recently established a pathway program with Harper College in Palatine for engineering students.

100,000 HOURS OF SERVICE AND COUNTING

Army veteran Ed Richter’s internship at the VA Illiana Health Care System in Danville is fulfilling requirements for a master’s in social work degree. Even better, his work in the facility’s post-traumatic stress disorder clinic dovetails with his interest in working in the Army as a social worker.

Graduate students in the School of Social Work on the Urbana campus are required to complete an internship of at least 30 hours a week at an approved placement site for a minimum of 32 weeks. The MSW students provide over 100,000 hours of service each year to agencies in Illinois. (Bachelor’s-level students work another 25,000 hours annually.)

Anita Patel is already a social worker and pursuing her graduate degree through the school’s outreach program, which makes it possible for individuals currently working in social service agencies to complete a degree off-campus. The outreach classes rotate among four sites around Illinois, an additional convenience to students.

Patel is fulfilling her MSW internship requirements two days a week at the Illinois Department of Healthcare and Family Services, which is also where she works three days a week. She researches the impact of policy changes and writes position papers about proposed legislation affecting the elderly. Her internship has given her a different perspective on social work as a profession.

“I’ve been so excited to see how policy changes trickle down,” Patel said. “Now I see that in policymaking you’re helping thousands – even millions – of people.”
Innovation born at the U of I has lifted society, with pioneering breakthroughs that include LED lighting, a powerful drug to treat HIV, and the first graphical Internet browser. It also has spawned world-class research facilities and a reputation for excellence that attracts top researchers, and the best and brightest students.

But federal funding that has historically fueled university research is at risk as the government wrestles with national debt that now tops $15 trillion. Since 2010, increases in federal research dollars have failed to keep pace with inflation, and funding levels could actually decline in fiscal 2013.

To ensure that its legacy of life-changing discovery continues to grow, the university has turned to corporate America to bridge the gap. Those public-private partnerships are a win-win for the U of I and businesses, said Vice President for Research Lawrence Schook.

"The partnerships give industry the new products and technologies it needs to grow, without adding in-house research staff," Schook said. "And they give the university the funding that is critical to attract and retain top faculty, improve facilities, and provide leading edge educational opportunities for our students."

Multidisciplinary research institutes such as the Beckman Institute for Advanced Science and Technology, the Institute for Genomic Biology, the Prairie Research Institute, and the National Center for Supercomputing Applications have computational and imaging strengths that enable cutting-edge research. Access to university facilities is a valuable benefit for corporate partners. For example, one third of the Fortune 50 has worked with NCSA since its inception in 1989.

Across the U of I’s three campuses, corporate funding for research has increased 30 percent in the last five years, to more than $51 million in fiscal 2012. Partners are a who’s-who of industry, including Archer Daniels Midland, Boeing, Dow Chemical, Microsoft, Walgreens and Yahoo!

Embracing public-private partnerships

Research is a pillar that has made the University of Illinois one of the world’s most accomplished and respected universities.
New partnership examines nutrition, brain development

The University of Illinois has partnered with global health-care leader Abbott Laboratories to create a first-of-its-kind research center that will explore the impact of nutrition on learning and memory in the human brain. Officials say the center is the first to combine nutritional research with neuroscience and promises breakthroughs that could span generations – transforming brain development for infants and cognitive retention for seniors. The Center for Nutrition, Learning and Memory, which will lead directed and solicited research, builds on more than 20 years of scientific collaboration between Abbott and the University. The center is based on the U of I’s Urbana-Champaign campus, utilizing the world-class research facilities of the Institute for Genomic Biology and Beckman Institute for Advanced Science and Technology, as well as the University’s Division of Nutritional Sciences and Neuroscience Program.

Research targets new sources of clean biofuels

The University of Illinois is a global leader in the push for next-generation biofuels that will help break oil’s grip on transportation. Since 2007, U of I has been a key partner in the Energy Biosciences Institute, a 10-year, $500 million initiative funded by oil giant BP that also includes researchers from the University of California at Berkeley and the Lawrence Berkeley National Laboratory in California. The unique partnership seeks to pioneer new sources of carbon-neutral fuels, moving beyond corn-based ethanol to develop biofuels that protect both the environment and the world’s food supply. The U of I is leading research in a host of critical areas, from promising alternatives such as switchgrass and Miscanthus to the impact of large-scale biofuel production on farm income.

Innovation Center serves industry, education

The UIC Innovation Center is a breeding ground for progress – and young minds. The four-year-old center unites corporate leaders with students and faculty researchers from across campus and across a host of disciplines. Together, they cultivate new products and services that provide real-world solutions for businesses of today, and real-world experience for students who will become the industry leaders of tomorrow. Students and faculty are currently working on projects with health-care leader Baxter International, cell phone provider Cricket Wireless, and Coinstar Redbox, a national movie rental company. The center, established in 2008 with a multi-million grant from telecommunications giant Motorola Inc., also hosts lectures and conferences that promote innovation in technology, product development and design.
With funding from a $1.5 million U.S. Department of Homeland Security regional catastrophic preparedness grant, UIC School of Public Health Adjunct Assistant Professor David Ibrahim and his team are working on a strategy to integrate the private sector with municipal and regional emergency management communities during a regional disaster.

The project focuses on the city of Chicago, 10 Illinois counties, five Indiana counties and one county in Wisconsin. The team is conducting an inventory of all essential regional communication systems, developing a region-wide private sector plan for communications, establishing an automated emergency response network, and compiling a list of all critical resources available during a catastrophic event.

Relying on voluntary participation from private sector partners, they will also assess communications, public health and health care, banking, drinking water, water treatment, and mass transit.

In another study, researchers are providing municipal government committees with visualization tools to manage crucial water resources. Many rapidly-developing areas outside Chicago rely solely on quickly-diminishing groundwater for municipal and individual water supplies. Complex, mathematically-based models make properly implementing water protection guidelines confusing.

Moira Zellner, assistant professor of urban planning and policy, is developing simpler visualization tools for use by water-protection and use committees representing diverse stakeholders.

Using a $250,000 two-year National Science Foundation grant, Zellner and her team are working on visualization instruments to help stakeholders see how interactions between land and water management practices can impact water availability.

The University of Illinois Research Park celebrated its 10th anniversary last year – and a prestigious international award. The technology park on the Urbana-Champaign campus was named 2011’s Outstanding Research Park by the Association of University Research Parks, chosen from among more than 700 research, science and tech parks worldwide. The park was honored for its broad impact on economic growth – launching new high-tech businesses, attracting corporate research partners, creating jobs and generating $4.1 million in annual tax revenue for the state.

The park is currently home to more than 90 companies, including industry leaders such as Archer Daniels Midland, Caterpillar, Deere & Co, Sony and State Farm, who have set up shop to partner with the University’s world-class researchers. More than 350 student interns work with them, gaining invaluable hands-on experience that will jumpstart their careers. Full-time employment has grown to about 1,300, with a total annual payroll of more than $81 million and an economic output of more than $169 million.

The park has also helped launch 145 start-up companies through EnterpriseWorks, an incubator that turns innovation into commercial businesses. Like the Research Park, EnterpriseWorks has also earned international acclaim – named one of the top 10 “incubators to watch” by Inc.com in 2011, and one of 10 incubators that are changing the world by Forbes in 2010. It is also part of a regional partnership that earned $638,000 in federal funding last year for an initiative that will foster new high-tech businesses and new high-paying jobs in East Central Illinois.
Two UIC studies are analyzing how mass media and taxes impact cigarette smoking behaviors. Two studies, supported by $14.2 million in National Cancer Institute grants, are being performed by researchers at the campus’ Institute for Health Research and Policy. One study is analyzing the effect of mass media, while the other is investigating the influence of cigarette taxes and prices on smoking behaviors.

Senior Research Scientist Sherry Emery and her team are measuring how much people are exposed to, search for and exchange pro- and anti-tobacco information in the media; how the activities are related; and how they relate to smoking behavior, beliefs and attitudes. She will evaluate what people actively search for online and exchange on social media websites.

“The hypothesis is that if you’re exposed to, for example, an ad that says you should quit smoking, your level of engagement with that information will be substantially lower than if you actively search the Internet for ways to quit smoking,” Emery said, adding that sharing information on social media would indicate an even greater level of engagement.

In a different study, economics Professor Frank Chaloupka and his colleagues will examine policies affecting retail tobacco prices, the impact of price on purchases, and how far consumers will go to avoid paying tax such as crossing state lines or buying online. His research is designed to show that government tobacco tax policies are being implemented in a way that maximizes the effectiveness in reducing use of the tobacco products.

His past research, which has found increases in cigarette prices to result in significant reductions of smoking, has been cited by the U.S. Surgeon General’s office and led to numerous substance-abuse policy initiatives.

The Institute for Health Research and Policy, launched in 1997, has been awarded a total of $207 million in research funding. In 2011, 64 studies totaling $25.7 million were in progress.

For Your Cell Phone, Thin Is In

In a few years, cell phones and e-readers might get even thinner because of graphene-based electronics. A research team on the Urbana-Champaign campus is hoping its current project will hasten the era of graphene-based consumer goods.

“Graphene is a very important material,” said Professor of electrical and computer engineering Joseph Lyding. “The future of electronics may depend on it. The quality of its production is one of the key unsolved problems in nanotechnology.”

Graphene is produced when methane gas is piped into a furnace with sheets of copper foil. While the process is cost-effective and the methodology is straightforward, the resulting graphene has defects because of the properties of copper.

Using advanced imaging techniques, Lyding (left) and collaborator Eric Pop (right) discovered that some areas on copper sheets have a lower-quality graphene growth. The best results are on areas of copper called (111), which has a densely packed hexagonal structure. The research team is investigating if (111)-quality copper foil can be manufactured while still being cost-effective.

“The question is, how do you optimize it while still maintaining cost effectiveness for technological applications?” said Pop, also an ECE professor. “We’re constantly refining our techniques, trying out new recipes. As with any technology in its infancy, we are still exploring what works and what doesn’t.”

Next up for the research team is further work on copper as well as studying the growth of other two-dimensional materials, including insulators to improve graphene device performance.
Clinical trials on the NovoTTF-100A System, a non-invasive device that disrupts the division of cancer cells in the brain, were performed at the U of I Hospital between 2006 and 2009. The trials were part of an international study designed to evaluate the device and its success in treating recurrent glioblastoma, the most aggressive – and common – form of brain tumor.

Engelhard and the Department of Neurosurgery were part of a randomized and controlled study conducted at more than 20 hospitals in the U.S. and Europe. The results showed that patients treated with the mechanism had comparable median overall survival times, fewer side effects and better quality-of-life scores than those treated with chemotherapy.

The device works by using alternating electrical fields to interrupt the rapid cell division exhibited by cancer cells. Once the location of the tumor is determined, several electrodes are placed on the patient’s shaved head. The electrodes are connected to the NovoTTF, which is powered by a portable battery. The patient remains attached to the machine indefinitely for 22 hours a day while continuing daily activities.

Following the trial, the U.S. Food and Drug Administration approved the device, which is now available for use at certified clinical sites.

Engelhard notes that patients with aggressive brain tumors have few treatment options. Thanks to the successful clinical trial and Engelhard, the NovoTTF therapy is another possibility for patients.

Engelhard is an associate professor and chief of neuro-oncology in the UIC College of Medicine.
EXPANDING THE CAPABILITIES OF THE POCKET GLUCOSE METER

Glucose meters, commonly used by diabetics to measure blood sugar content, can now be used to identify other substances. Urbana campus chemists have discovered a way to expand the simple, portable and inexpensive meter’s use. On their own, the meters can only detect glucose. Coupled with functional DNA and RNA sensors, they can detect a variety of molecules in blood, serum, water or food. A modified meter can spot any kind of molecule that a functional DNA or RNA sensor can bind, including cocaine, adenosine and uranium. Previously, functional DNA and RNA sensors were available only in laboratories housing complex and expensive equipment.

“The advantages of our method are high portability, low cost, wide availability and quantitative detection of a broad range of targets in medical diagnostics and environmental monitoring,” said chemistry Professor Yi Lu. “Anyone could use it for a wide range of detections at home and in the field for targets they may care about, such as vital metabolites for healthy living, contaminants in their drinking water or food, or potential disease markers.”

Researchers are now working on simplifying their method even further. Currently, users have to apply a liquid sample to the functional DNA sensor and then to the glucose meter. Lu and postdoctoral researcher Yu Xiang would like to integrate the two processes.

The research, published in the Nature Chemistry journal, was supported by the U.S. Department of Energy, National Institutes of Health and National Science Foundation.

BARCODES TAKE ON A NEW ROLE

The ubiquitous barcode is evolving. The familiar black-and-white stripes on product packaging are morphing into a broader class of identifiers that will give consumers more information about goods they purchase.

Scott Morris, professor of food science and human nutrition on the Urbana-Champaign campus and author of the textbook Food and Packaging Engineering, says the next stage of barcode technology will allow access to details on the contents and life cycle of products.

In the future, Morris believes, consumers will be able to use the cameras on their smart phones to scan barcodes and learn about the factory that made a product or the country of origin of produce. The codes will increase communication between buyers and sellers and help to ensure that a product is safe and not counterfeit.

A global identifying system would allow companies to obtain more details about its consumers, including where they are located and when and how they make purchases. It would also increase business efficiency and profits.
“I was a frequent flyer in the emergency room,” Ross says.

In late February 2009, Ross underwent an experimental treatment for diabetes at the University of Illinois Hospital & Health Sciences System. A team led by Jose Oberholzer, MD, chief of transplant surgery and director of cell and pancreas transplantation, transplanted insulin-producing islet cells into Ross’ bloodstream. She quickly began tapering off her insulin injections, stopping them altogether by mid-April of 2009.

She hasn’t needed them since.

“I don’t have the words to thank Dr. Oberholzer and his team,” she says. “They have given me my life back.”

The Chicago Diabetes Project is an international research effort led by Oberholzer and based at the UI Hospital and College of Medicine. Since 2005, 25 patients have received transplants, and most have remained insulin-free. The small number of transplant patients reflects the project’s very limited finances (most insurance plans both private and public do not cover islet cell transplants as the treatment is still considered investigational) and the very small number of available donor pancreata.

Because of the limited availability of organs, project researchers are trying to find ways to grow islet cells. Collaborators at the Cleveland Clinic and at Johns Hopkins are investigating genes in mice that regulate how stem cells develop into insulin-producing cells.

“The UI hospital likely would become the first center in the U.S. to offer this treatment as a standard of care,” Oberholzer says. “I look forward to the day when we can offer islet cell transplant widely to the large number of diabetic patients whose lives would be improved and, in many cases, saved by this treatment.”
Knocking back hepatitis C

An estimated 4.1 million Americans are infected with hepatitis C (HCV), a leading cause of liver disease. A molecule embedded in the membrane of liver cells, which has a receptor called NPC1L1, allows for the entry of the hepatitis C virus, the first step in becoming infected. Coincidentally, the same molecule also aids in cholesterol absorption; the NPC1L1 receptor is the target for an existing FDA-approved drug used to lower cholesterol. A UIC research team led by Susan Uprichard, a professor of medicine and microbiology and immunology, is using the cholesterol drug to test NPC1L1’s involvement in HCV infection. They have successfully blocked the receptor and inhibited HCV infection. The study opens up possibilities for therapeutics, according to Uprichard. The study, funded by several NIH programs, was published in Nature Medicine.

Peace Care travels to Senegal

Every year, approximately 1,200 women are diagnosed with cervical cancer in the west African nation of Senegal. Nearly 800 die. UIC health professionals travel to Senegal to provide needed training and care on trips organized by Peace Care, an organization founded by Andrew Dykens, director of the Global Health Program. Last year, after learning from local residents that cervical cancer prevention services were needed, Peace Care workers showed area health trainers how to conduct mass screenings. This year the delegation will teach trainers cryotherapy – using nitrous oxide to freeze and kill precancerous cells. The project is a collaboration between Peace Care, UIC’s Department of Family Medicine and School of Public Health, the Kedougou region, and Peace Corps Senegal.

“Ampho-terrible” on its way out?

Urbana chemists have discredited a common misconception about a widely-used prescription drug. Amphotericin, prescribed for systemic fungal infections, is highly toxic and commonly referred to as “ampho-terrible.” Martin Burke (right) and his team wanted to produce a less toxic derivative of the drug, which works by binding to a lipid molecule, ergosterol, essential to yeast’s physiology. The binding is the first step in forming the complexes that make ion channels, which was previously thought to be the mechanism that kills the fungus and yeast cells. But, researchers discovered the drug does not need to make ion channels to kill cells. In turn, the group created a derivative almost as potent as amphotericin that binds ergosterol but doesn’t form the channels. The research was published in the journal Proceedings of the National Academy of Sciences.
NEW PARTNERSHIP FOR IMPROVING CARE FOR SARCOIDOSIS

Bernie Mac was a beloved entertainer, a Chicago native whose knack for generating laughter stood in contrast to his suffering from sarcoidosis, a mystifying chronic disease that attacks multiple organs, most often the lungs and lymph nodes. Mac died in 2008 at age 50 from complications of sarcoidosis. Three years later, a foundation named for him is partnering with the University of Illinois Hospital & Health Sciences System to demystify sarcoidosis and lend some star quality to UI Health’s quest for a cure.

“Sarcoidosis is a complex disease with unknown etiology but that disproportionately affects African-Americans, so there are many patients that identify with Bernie Mac,” according to Nadera Sweiss, MD, director of the health system’s sarcoidosis program. “His death was devastating to a lot of my patients. They would come to me and say, ‘Am I going to die the same way Bernie Mac died?’”

In talks with the Bernie Mac Foundation, Sweiss unveiled the imagery of a “star center” that would incorporate Bernie Mac’s star quality as well as an acronymic identity: Sarcoidosis Translational Advanced Research.

The idea intrigued Rhonda McCullough, Mac’s wife of 30 years. Her relationship with Sweiss and other health system leaders cemented her desire to offer funding and the foundation’s visibility to launch the partnership.

“When the opportunity came up that we would be able to work with UIC, for me it was like a dream come true,” she says. “I always wanted to partner with a world-renowned facility—they had the means, they had the pulmonologists in place. It was just wonderful. And, to me, their focus mirrored mine.”

TRAINING URBAN PHYSICIANS

Established in 2005, the College of Medicine’s urban medicine program combines traditional medical studies with specialized training for underserved populations.

Students take the same coursework as other medical students and participate in the same hospital rotations. Additional classes address topics such as diversity, health care disparities, intercultural communication, and advocacy and public policy. Faculty include sociologists, public health practitioners and public policy professors.

“We hope our physicians come out with a stronger sense of cultural sensitivity, especially in the diversity of an urban setting,” said Jorge Girotti, director of admissions and associate dean.

Program-specific rotations connect the 100 students to community organizations during their first year of medical school. Later, they work with an organization on a special project.

For example, Yury Parra (right) is developing workshops for hairdressers in the Pilsen community, helping them identify telltale signs of abuse, such as missing hair or bruises and unusual bumps. She volunteers at Mujeres Latinas En Acción, which offers programs for Hispanic women including a bilingual crisis help line.

“The program has allowed me to grow and understand the complexity of working as a health care professional,” said Parra.

Jeremy Howe decided to enroll in UIC’s College of Medicine specifically because of the urban medicine program.

“It was everything that I felt like medicine was supposed to be doing, with its focus on the underserved community,” he said. “It’s been a great way to connect with likeminded medical students.”
FIGHTING HEALTH DISPARITIES THROUGH COMMUNITY-BASED PROGRAMS

UIC faculty, public health professionals and community members are giving women and girls in rural Illinois a greater chance at a healthy life by increasing exercise and eating more nutritious foods.

Females in southern Illinois are more prone to health risks than those living in other parts of the state. They have greater incidence of high blood pressure, cholesterol, smoking and diabetes. During a regional health assessment conducted in 2011, access to health care, attitudes and lifestyle choices were found as the main causes for such disparities. Economics, transportation barriers and lack of insurance also play a role.

UIC faculty affiliated with the Office of Research on Women and Gender are working with the Southern Seven Health Department – serving the counties of Alexander, Hardin, Johnson, Massac, Pope, Pulaski and Union – and local churches in a project designed to decrease the prevalence of the identified health risks.

A five-year, $1.5 million U.S. Department of Health and Human Services grant is supporting the continuation of an existing program that connects with the traditionally underserved area of the state, said Stacie Geller, director of the Office of Research on Women and Gender.

The UIC office and local health department are running a 12-week program called Heart Smart for Women that is being offered at a dozen churches. Program participants take part in walking groups to increase physical activity and watch cooking demonstrations to improve nutrition. Upon completion, a monthly maintenance program is offered to help changes become long-term additions to the program members’ lifestyle.

GIVING PARENTS A ROLE IN CHILD’S INTENSIVE CARE

Parents of children admitted to the neonatal intensive care unit can play a critical role in the infant’s care by being included on the health care team.

A new curriculum at UIC’s College of Nursing will teach doctorate-level students to operate under this philosophy. Students in the advanced-practice neonatal nurse practitioner specialty will learn how to form partnerships with parents through information sharing, decision-making and care.

“Patient and family-centered care is a strategy to improve patient safety and outcomes, as well as patient, family and staff satisfaction,” said Rosemary White-Traut, professor and head of the Department of Women, Child and Family Health Science. “It is based upon four principles: dignity and respect, information sharing, participation in care and collaboration.”

The model was developed based on recommendations from the Institute of Medicine that encourage providers to have the essential attitudes, knowledge and skills to partner with families. The curriculum is supported by a three-year, $1.15 million U.S. Department of Health and Human Services grant.

Five courses are being developed, which will be taught online and through distance-learning by videoconferencing to students at UIC and regional medical campuses in Rockford, Quad Cities, Urbana and Peoria. Students will work at clinical sites to learn and practice their skills. Sites selected will be part of community-based medical centers accepting referrals from rural areas, long-term care organizations, medical center systems and outpatient developmental clinics.

An advisory board is also being established to provide perspective on patient and family-centered care in neonatal services.
Prison education program benefits university, society

Studies in the humanities enrich lives, from the joys of literature and performing arts to the lessons of history and philosophy. Through an innovative program at the University of Illinois, they are also changing lives.

Since 2006, U of I faculty and graduate students have used education to build self-worth and potential, teaching upper-division courses every semester for inmates at Danville Correctional Center, a high-medium security facility less than an hour from the university’s Urbana-Champaign campus.

But the impact of the program ripples far beyond the hundreds of prisoners who have earned confidence and college credit in largely humanities-based courses ranging from Shakespeare and politics to the history of the Holocaust and civil rights, according to landscape architecture professor Rebecca Ginsburg, who co-founded the Education Justice Project. She says the inmates’ zeal also re-energizes faculty and students who volunteer their time to teach, and they carry that passion back to campus and their traditional classrooms.

The benefits to the university don’t end there, Ginsburg says. The program also contributes to the university’s research mission, producing scholarship that makes the case for providing higher education in prisons and its payback for society.

The program offers up to three courses per semester that earn college credit at the U of I, but does not yet lead to a degree. To qualify, inmates must have at least 60 hours of college credit, typically earned through community college courses offered at the prison.

About 120 of the prison’s 1,880 inmates enroll in the program, funded through grants and private donations. Most entered prison without even a GED and are serving lengthy sentences for serious, violent crimes, usually committed at a young age.

Ginsburg says the program provides skills to help inmates succeed upon their release and has even spawned life-changing programs inside the prison, including one that trains bilingual students in the program to teach fellow inmates who speak only Spanish. She notes the program has also improved relationships between inmates and their families outside the prison’s walls, thanks to the humanizing and relationship-building nature of their classroom studies.
The history of ‘Crossing Borders’

History Professor Dorothee Schneider, of the Urbana campus, is shining new light on the long-debated topic of immigration. Her book, *Crossing Borders: Migration and Citizenship in the Twentieth-Century United States*, was published by Harvard University Press in 2011. An immigrant herself, Schneider presents an in-depth look at immigration’s past and the many obstacles that U.S. immigrants face. She outlines the difficulty in becoming a citizen, dispels the myth that immigrants were unknowledgeable and powerless, and examines the desire and need to become a resident, and how those elements have changed throughout the years. Schneider combines the personal stories of U.S. immigrants with the history of government actions.

The tower and the ravens

In *City of Ravens: The True History of the Legendary Birds in the Tower of London*, UIS adjunct philosophy instructor Boria Sax examines the history and emotion behind the ravens of London. The birds have been categorized for more than a century as symbols of cruelty and resilience, while also becoming a prized symbol of British heritage. He demonstrates how the lines between myth and history can blur over time. Sax reveals the answer to the mystery of when ravens came to the Tower of London and investigates the origin of the legend that “Britain will fall” if the birds leave. Overall, the book addresses the human need to connect with animals and the natural world. The book was published in the United Kingdom in 2011; it will be published in the U.S. by the summer of 2012.

Urban sex work and race

In her new book, UIC Associate Professor Cynthia Blair explores the sex work of African American women in Chicago during the early 1900s. Blair, who teaches in the African-American studies and history departments, was honored for *I’ve Got to Make My Livin’: Black Women’s Sex Work in Turn-Of-The-Century Chicago* with the 2011 Lora Romero First Book Prize from the American Studies Association. In the book, Blair considers the relationship between urban sex work and race, expanding on the meaning of black women’s labor, the Great Migration, reform movements and modern sexuality. She talks about the sex districts of the city’s south side, shares stories of the common struggles among black women, and displays the anxieties that underlined the celebration of Chicago as a prevailing twentieth-century city.
Michael Burlingame knows Abraham Lincoln inside and out. The author of a dozen books about the Civil War president, Burlingame is the Lynn Distinguished Chair in Lincoln Studies at UIS. His latest book, *Abraham Lincoln Traveled This Way: The America Lincoln Knew*, coauthored with photographer Robert Shaw, tells Lincoln’s life story in photos. Shaw’s images combine with Burlingame’s words to give the reader a better understanding of the places that helped shape our 16th president. Among the buildings and locales included in the 276-page book published by Firelight Publishing are Lincoln’s childhood homes in Kentucky and Indiana, the White House, Civil War battlefields, Ford’s Theater, and, of course, Illinois locations. Burlingame lives in downtown Springfield near the Lincoln Presidential Library. The location is convenient for the scholar who taught at Connecticut College for more than 30 years. He continues to use the resources at the library for future projects.

Each fall, Burlingame teaches a seminar to undergraduate and graduate students on Lincoln’s presidential years and his administration with a focus on Lincoln’s writings. When he first joined UIS, in 2010, he noted that he wanted his students to conduct their own research on Lincoln and the many people who influenced his life. The presidential library offers significant source materials for his students to mine each year for their original research projects.

Matthew Thibeault, professor of music on the Urbana-Champaign campus, is providing aspiring music educators with the tools to empower their students – and themselves – to enjoy making music. The course, taught by Thibeault and titled “Designing Musical Experiences,” is commonly referred to as “the ukulele course.” Using a simple kit, Thibeault’s students construct their own ukuleles and then use videos on the Internet to teach themselves and each other songs. At the conclusion of the semester the class gives a public performance under the name “Homebrew Ukulele Union.”

The small guitar-like instrument is the focus of the course because it is user-friendly. A ukulele only has four strings, frets are closer together and basic chords can be played easily on it, Thibeault said. The class was started after several musicians pointed out that they were only comfortable playing music when being directed. Thibeault wants his students to enjoy picking up an instrument and just playing, and passing that joy onto their students when they become teachers.

“Ironically, [the joy of making music] gets left out of people’s music education and it gets left out of the conception of what it should be to be a music teacher,” Thibeault said. The underlying philosophy for the course comes from U of I ethnomusicologist Thomas Turino’s definition of participatory music, which uses simple structures and repetition to “invite audience participation through singing or dancing.” Thibeault offers his undergraduate and graduate students a rare opportunity to be active participants in the creative process through construction and playing.
DANCE AS A WINDOW TO INTERNATIONAL RELATIONS

Musicologist and cultural theorist Alejandro L. Madrid is using dance to discover more about global relations.

Madrid is studying danzón, a dance of Cuban origin, to dissect transnational relations between Cuba and Mexico. An associate professor of Latin American and Latino studies at UIC, he received a collaborative research fellowship from the American Council of Learned Societies to complete his studies.

The $110,000 award, one of only six humanities grants awarded by the Mellon Foundation, supports research by Madrid and his collaborator, Robin Moore of the University of Texas at Austin.

Madrid, a 2008 Fulbright Scholar, and Moore will study danzón in Cuba, Mexico and New Orleans. Although the style of dance was started in Cuba, it combines European and African elements.

He will also complete a book about danzón history, its influences and contemporary practice.

Madrid’s research focuses on the connection of modernity, tradition, globalization and identity in music and other expressive culture from Mexico, the U.S.-Mexican border and the Caribbean coast.

In 2010, he was honored with the International Association for Study of Popular Music’s Woody Guthrie Book Award for his book Nor-Tec Rifa! Electronic Dance Music from Tijuana to the World.

MEMORY MISFIRE

“Memory is not like pressing ‘play’ on a video recorder,” says Brian Gonsalves, professor of psychology on the Urbana campus. If it were, most of us would recall events and information more accurately.

Asked to recall a memory, most people recollect only some elements of an event. This cranial flotsam and jetsam is insufficient so the brain reconstructs information. During that reconstruction, our brains are particularly prone to error for a variety of reasons including memory attrition over time or poor encoding initially.

Memory reconstruction is a key time that false memories can be planted. In a study conducted by Gonsalves, subjects had a false memory approximately a third of the time. Accurate information was recalled 54 percent of the time; 14 percent of the time subjects could not remember either the accurate or false information.

Gonsalves monitored his subjects with MRI to see if any changes were taking place when false memories were planted. Subjects with false memories had lower activity levels in their fusiform cortex – the part of the brain responsible for specific information, such as the color of a coat.

His work has implications for eyewitness testimony. Some people might remember the general context of an event but not encode details.

“Even though you have a general idea of what happened, you might not have been paying attention to the details,” he says. “[T]his is when you are most susceptible to misinformation planted by lawyers or other people. The reconstruction of memories can be very prone to error.”
Engaged Citizenship Common Experience courses – tied to UIS’ heritage, mission, vision and values – are required of all undergraduates. The Experiential and Service-Learning programs offer service options that help fulfill the ECCE requirement or a minor in service. The campus Volunteer and Civic Engagement Center provides logistical support for planning service opportunities and organizes community projects.

In 2011 the UIS community was busy delivering daily essentials to children in Africa, helping a Missouri community recover from a natural disaster, and collecting more than 7,000 pounds of food for Springfield’s neediest residents.

Undergraduate Josh Eastby was among the 18 students who assisted with clean-up after the devastating tornado in Joplin. The group helped unload and sort donated items from around the country and cleaned debris from a farmer’s field. He was enlightened by the experience and happy to lend a hand with the recovery.

“Everyone can do something,” Eastby said. “None of us there fixed the tornado, but we all did something that now other people won’t have to do.”

In 2011, more than 65,000 community service hours were logged by UIS students.

UIS ‘making a difference in the world’

Each year UIS students, faculty and alumni help their community – locally, regionally and globally. Public service is part of the campus philosophy “to make a difference in the world.”
IGPA a partner in well-being of Illinois

The University of Illinois is committed to both the future of its students and the progress and prosperity of the state. The U of I’s Institute of Government and Public Affairs is a cornerstone of the public service mission, delivering informed, non-partisan research and analysis to help guide policymakers as they work to solve the state’s most pressing challenges. IGPA faculty experts lend their world-class insights in the annual Illinois Report, exploring key issues ranging from the state’s ongoing budget crisis to the long-term implications of Illinois’ growing Latino population. The institute also hosts an annual State Summit, where IGPA faculty and leaders from government and industry converge to examine the most urgent challenges currently facing Illinois. Recent summits have tackled Medicaid and public pension reforms, producing in-depth reports that promote both effective solutions and public understanding.

Irrigation in an arid region

A team of researchers from the Department of Agricultural and Biological Engineering in Urbana is part of a six-university partnership developing a water allocation model that will help communities in Lebanon increase their agricultural production while using less water. In arid northeast Lebanon, which receives less than 12 inches of rain annually, crops must be irrigated with pumped groundwater, a rapidly depleting resource. During recent visits to the region, PhD student Joseph Monical collected soil and water samples and mapped the pumping and irrigation layouts. The data will help form the foundation for future research with an ultimate goal of evaluating alternate cropping and irrigation strategies that will enhance production, minimize crop losses, and possibly “recharge” groundwater levels. Professor Prasanta Kalita leads the USAID-funded project.

Golden opportunity for Chicago’s homeless

Chicago’s homeless don’t have to go without dental care thanks to the clinic at Goldie’s Place. Dental students treat the clinic like a private practice – learning valuable lessons about dental care access for underserved populations and helping the homeless be healthier. More than 75 UIC dental students with all levels of training volunteer at the clinic every other Saturday. The students manage and operate the clinic, performing cleanings, fillings, tooth extractions and prosthetics fittings. A faculty advisor oversees their work. Patients are referred by more than 110 social service agencies. In 2011, the program was recognized by the American Dental Association Foundation with the Bud Tarrson Dental School Student Community Leadership Award.
Diversity central to university’s mission

The ethnic and racial tapestry of the U.S. is changing, and the University of Illinois is working to ensure the nation’s growing diversity is stitched into the fabric of its three campuses.

U.S. minority population is on the rise, surging from about 28 percent in 2000 to 35 percent in 2010. Experts predict minorities could become the country’s new majority by mid-century, paced by rapid growth among Hispanics.

U of I enrollment reflects the shifting demographics. Its campuses have added more than 1,500 undergraduates from underrepresented groups in the last decade, providing life-changing opportunities and expanding campus diversity that is vital as the University prepares students to excel in an increasingly global workplace.

But University officials say those gains are just a beginning and are committed to campuses that mirror the rich cultural diversity of the state and the nation. This year, the University put an additional $6 million into recruitment of students from underrepresented groups, and an additional $1 million into minority faculty recruiting.

Diversity is also a priority in business practices. The University has raised state-mandated goals for participation by minority- and female-owned (MAFBE) companies in purchasing and construction projects, and regularly monitors progress to build on its gains.

Last year, the University launched two new initiatives to ensure it never loses sight of its diversity goals.

An annual Presidential Lecture on Diversity will bring in leading global experts to share their invaluable insights and keep diversity top-of-mind. The inaugural speaker was National Medal of Science winner Richard A. Tapia, a Rice University mathematician and longtime champion of underrepresented minorities in the sciences.

The U of I also launched its first University-wide climate survey, which will serve as a barometer of the academic, work and social environment on its campuses.

The survey, distributed to all of the university’s nearly 100,000 faculty, staff and students, will gauge perceptions of critical issues such as friendliness, professionalism and opportunities for advancement. It will be repeated every few years to ensure that the university is welcoming to all – with a work and study environment that fosters opportunity and success.
Student veterans bring new dimension

Of the 44,000 students on the Urbana-Champaign campus, more than 350 are veterans and that number is expected to increase. Coast Guard veteran Nick Osborne leads a new office that provides support services for veterans, who may be out of practice in an academic setting. The Veteran Student Support Services office provides a range of services including accommodations for disabilities, flexibility in classroom assignments, obtaining assistance with government benefits, counseling services, and emotional support. A lounge in the Illini Union, where student veterans can gather between classes, is expected to be complete by the fall.

Math matters

Ninth-grade algebra, according to educators, is the most frequently failed high school course. Research shows that those who fail the equation and polynomial-heavy course tend to drop out, graduate late or skip higher education all together. UIC doctoral student in mathematics education Maisie Gholson is using a three-year, National Science Foundation $90,000 grant to learn how to help African-American students excel in algebra classes. Gholson is analyzing the impact of talk — spoken lectures, classroom discussions and student-to-student conversations — in algebra classes in urban high schools. “All learning happens through talk, and everyday classroom talk affects the way African-American students see themselves, racially and academically,” Gholson said.

Celebrating international diversity

For more than three decades, UIS has celebrated the campus’ global diversity at an international festival. Held each fall, the International Student Festival is open to students, faculty, staff, and members of the Springfield community. “The festival draws people’s attention to the diversity that we have around here. It’s not just a small community with one kind of person; it’s actually a lot of different types of people with different backgrounds,” said Cassie Bernardi, graduate assistant in the Office of International Student Services. In the fall of 2011, 260 international students were enrolled at UIS, five percent of the undergraduate student population of 3,100.
Students in NRES 102. See page 8.