Brilliance at Illinois

Annual Report 2005–06
The University of Illinois—complex, consequential and rich in history—strides confidently into the future. We have high aspirations. We have important work to do. And we have the capacity not only to maintain our standing as a great American university, but to create a brilliant future.

I believe that the University of Illinois is an asset of extraordinary value in creating a prosperous future for the people of Illinois, the nation and the world. Educated people and knowledge from research that creates new industries, companies and jobs are the wealth of the new economy. At the University of Illinois, we educate people and create new knowledge on a large scale, with excellence.

Brilliance at Illinois, the University’s annual report for 2005–06, samples across our three campuses, highlighting some of the University’s finest recent work in science, the arts, engineering and technology, health and well-being and the humanities. As you will see, our faculty are creative, compassionate and committed. They propel the reputation of the University. We have the ingredients for a brilliant future: a great faculty, bright students and committed alumni and friends.

I look forward to working with you for Illinois in the years ahead.

Sincerely,

B. Joseph White
PresidentWhite@uillinois.edu
Battling Diabetes & Well-being
Collaboration Offers Hope for a Cure

Nearly 194 million children and adults worldwide are battling diabetes and Jose Oberholzer, M.D., is on the front lines of the fight. Oberholzer, director of cell and pancreas transplantation at UIC, is one of the few who has successfully transplanted healthy islet cells (those in the pancreas that produce insulin) into people with diabetes, taking away their need for insulin injections.

But Oberholzer isn’t resting on this success. Although his approach works, he is tackling obstacles to helping more than a handful of patients: there aren’t enough islet cells to go around and, as with any transplant, the patient’s body is inclined to reject foreign cells.

Oberholzer has created the Chicago Project, an intellectual collaboration among 50 worldwide health professionals to find a cure for diabetes.

“If there is one place where I could do more, it is Chicago, because there is such an accumulation of intellect,” Oberholzer said. “Plus, O’Hare Airport opens the door to the world, offering both access to donor organs and the ability to ship islet cells around the world.”

Oberholzer left his native Switzerland and the University of Geneva to join the University of Illinois at Chicago in 2003. He is a triple threat: as a transplant surgeon, clinician and researcher, he oversees everything from organ procurement to cell processing to selection of the patient, the transplant and follow-up. Still, what he considers special is the collaborative, rather than competitive, approach to problem-solving that typifies the Chicago Project, which has pulled together the best and most innovative minds, each with a highly specialized area of expertise.

The team developed a microencapsulation system — working in laboratory mice so far — to prevent the body’s immune system from attacking the new islet cells. They also discovered methods to enhance the function of available islet cells so that a single pancreas can provide enough cells for one recipient. Previously, each recipient required two or three donor organs.

Ironically, the cooperative nature of his approach has made grants difficult to come by, says Oberholzer. Funding agencies like the National Science Foundation love competition. So for now, the Chicago Project is driven in part by private funding and program grants. He hopes that will change.

With Oberholzer leading the charge, the war on diabetes may yet be won and, as he predicts, Chicago could become the “Silicon Valley of diabetes cures.”
Mimicking membranes
The new National Center for Biomimetic Nanoconductors on the Urbana-Champaign campus will develop technology for devices that accomplish many of the functions of natural biological membranes. The center, directed by professor of molecular and integrative physiology Eric G. Jakobsson, is one of four centers nationwide established by a National Institutes of Health grant.

Healing wounds
Researchers at the UIC College of Dentistry found that psychological stress caused by confinement delayed the closing of wounds by more than 45 percent in laboratory mice. Led by Phillip Marucha, professor of periodontics at Chicago, the team also found that extra oxygen almost completely reverses the effect.

Seek and destroy approach
A professor of biochemistry at Urbana-Champaign is developing a non-surgical cure for brain cancer. Professor David Kranz and his team alter T-cells so that they bind to and then destroy tumor cells, reducing the cognitive loss associated with surgery.

First in the nation
Giuliano Testa, M.D., right, professor of surgery at UIC, performed the first robotic complex liver surgery in the United States on Linda Kahan, left. Superior to traditional laparoscopic surgery, the robot provides a 360-degree range of motion not possible with traditional laparoscopic instruments.

Licking food poisoning
By understanding how microbes that cause food poisoning live and replicate, Urbana-Champaign professor of animal sciences Bryan White hopes to reduce the risk they pose to humans.

Hypoallergenic soybean
Researchers led by Theodore Hymowitz, professor of plant genetics at Urbana-Champaign, found the soy protein that causes allergic reactions in children. The finding leads the way to development of a hypoallergenic soybean.

Mighty molecule
Chemist David Gin at the Urbana-Champaign campus has synthesized a medically important molecule that helps the body battle disease. The molecule, QS-21A, boosts the body’s immune response against such diseases as melanoma, breast cancer, small-cell lung cancer, HIV-1 and malaria. The molecule is available naturally only in small quantities from the South American tree, Quillaja saponaria Molina.
Sizing up medicine
Vaccines and medicines delivered by shots may someday be timed to release the drugs with unprecedented precision. Urbana-Champaign biomolecular engineering professor Daniel Pack teamed with Kevin Kim, professor of electrical and computer engineering, to create precise-size microspheres encasing a drug that determine how quickly the medicine is released into the body.

AIDS training
The UIC Jane Addams School of Social Work received a major grant from the U.S. Department of Health and Human Services to train health care workers in treating HIV patients. The Midwest AIDS Training and Education Center, housed at the school, has trained more than 2,000 HIV clinical providers each year since its founding in 1988.

Beneficial breast milk
Studies at the College of Agricultural, Consumer and Environmental Sciences on the Urbana-Champaign campus suggest that breast milk could help prevent obesity, says Sharon Dononvan, the Melissa Noel professor in nutrition and health, who studied differences between breast- and bottle-fed babies. Her findings were published in the journal, “Pediatrics.”

Life expectancy
A team of researchers led by UIC epidemiology professor S. Jay Olshansky predicts a decline in life expectancy in the United States later this century.

Healthy weight loss
Women with a 1,700-calorie-per-day diet high in protein and low in carbohydrate lost more body fat and less muscle mass than women who consumed the same number of calories, but with more carbohydrate and less protein. Conducted by Donald Layman, professor of nutrition at the Urbana-Champaign campus, the study also found that protein eaters had a significant decline in triglycerides.

Great grapes
Research conducted by Mary Ann Lila, left, professor of plant physiology at Urbana-Champaign, and Elvira Gonzalez de Mejia identified components in grapes that help slow the proliferation of cancer cells. The components work against an enzyme critical to cancer cell growth.

Start them young
U of I Extension at Urbana-Champaign program educators are helping Chicago Head Start teachers educate three- to five-year-olds about nutritious food. The Healthy Moves for Healthy Children program reaches an estimated 2,000 children.

Botanical alternatives
Researchers in the UIC College of Pharmacy are investigating the quality, safety, standardization and usefulness of botanical supplements that may relieve women’s menopause-related symptoms and serve as alternatives to hormone replacement therapy. The five-year study is led by Norman Farnsworth, professor and director of the program for collaborative research in the pharmaceutical sciences.

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Designing
Quality

Architecture Affects Communities

Roberta Feldman practices what she believes: that the quality of the built environment is key to the political, economic and cultural vitality of communities. As UIC professor of architecture and co-director of the City Design Center, she has ample opportunity to further her belief with research and teaching that promote social change.

“I am interested in the meaning of the physical environment for everyday people, not just for those who typically hire architects,” Feldman said.

Established in 1995, the City Design Center provides technical assistance to improve planning and design decisions that affect community residents. The center’s clients may be community groups, governmental agencies or development corporations. “We don’t work for the for-profit sector and our government work is typically for moderate and lower income end-users,” Feldman said. Students’ educations are an important part of the center’s work.

Feldman’s award-winning book, “The Dignity of Resistance: Women Residents’ Activism in Chicago Public Housing” (with Susan Stall), captures activists’ efforts to improve their developments’ living conditions. Through Feldman’s 15 years of technical assistance, she learned a different perspective while supporting their struggles. “Running the center gives me an opportunity to do truly engaged longitudinal research that I couldn’t have done if I was merely an observer,” she said.

To expand public awareness of design’s importance, Feldman launched “Design Matters: Best Practices in Affordable Housing” as an online venture to illustrate that “quality design can be affordable and affordable housing can embody quality design.” Her conclusions, in collaboration with an interdisciplinary committee of architects, for-profit and non-profit developers, governmental agencies and financiers, are now used by housing advocates across the country and are part of state public policy in Florida.

Feldman recently organized a Chicago Field Museum exhibit of commissioned designs titled “Out of the Box: Design Innovations in Manufactured Housing.” “Architecture can’t cure poverty, but there is no doubt that when people live in well-designed and well-maintained housing, they can experience better lives.”

MAKING HISTORY

The University of Illinois began month-long Festivals of Contemporary Arts in 1948 to present works in music, dance, theater, film, architecture, the fine arts, landscape architecture and urban planning. Featuring both established and new artists, the first exhibition drew nearly 10,000 people as “Art Digest” hailed the initial show’s “status of national importance.” Over the next 26 years the University held 15 Contemporary American Arts Festivals showcasing more than 1,000 artists and 2,000 works. Pieces from these shows are in the permanent collection of Krannert Art Museum and Kinkead Pavilion on the Urbana-Champaign campus.
Photography exhibition

“Merge,” an exhibition at the UIS Visual Arts Gallery, featured work by Bea Nettles, professor of photography at Urbana-Champaign. The opening reception included performances by Marcellus Leonard, poet and UIS English professor, and Denise Yates, vocalist and UIS alumna. Nettles’ autobiographical works have been in major international exhibitions and more than 50 solo shows.

An American premiere

Fifty years after Romanian composer and musician George Enescu died, his opera “Oedipe” had its American premiere at Urbana-Champaign. Orchestrating the event was the music school’s resident Romanian-born musician and Enescu authority: violinist and Sinfonia da Camera concertmaster Sherban Lupu. Enescu was a visiting artist and professor at Urbana-Champaign in 1948, 1949 and 1950, performing, conducting and teaching.

Alum wins first Beverly Sills Award

Nathan Gunn’s “superb musicianship and charismatic stage presence,” won him the first Beverly Sills Artist Award for young singers. Gunn, a baritone, recently appeared in Tobias Picker’s new opera, “An American Tragedy,” at the New York Metropolitan Opera, and he has sung with leading opera companies around the world. He earned his bachelor’s degree in music at Urbana-Champaign in 1994.

Student designs Latin Grammy poster

The vibrant and energetic artwork that art student Vivian Zapata created captured the spirit of celebration the Latin Recording Academy and Latino Art Beat wanted for the 6th Annual Latin GRAMMY awards. Zapata’s winning artwork was used on the award invitation, show tickets, poster and program book. Zapata, a sophomore at Urbana-Champaign, also won a one-year scholarship.

Rock star Sting teaches class

British rock star Sting advised students to learn from masters like Stravinsky and Bach as he guest taught a course on music composition at UIC. Sting led a discussion about songwriting as part of an MTV episode of “Stand-In.” Sting was a teacher before his career as a member of The Police in the mid-1970s skyrocketed.

Hyper-real film experience

Multiple screens, surround sound and live music combine in the opera, “The End of Cinematics” by Mikel Rouse. In a challenge to the bigger-louder-faster corporate entertainment model, this opera draws on the richness of the old-time cinema and the hyper-real 21st century experience of viewing media in fragmented form. The third opera in a trilogy, the project was co-produced by and premiered at Krannert Center for the Performing Arts.

Carnegie Hall debut

For the first time, the University of Illinois Wind Symphony played at Carnegie Hall in New York. The campus at Urbana-Champaign generally is regarded as the birthplace of the modern concert band, says James F. Keene, director of bands, who led the performance. The concert was the inaugural event in the University Honors concert series organized by Choice Music Events. “Illinois Loyalty,” first performed 100 years ago, was among the works performed by the Wind Symphony.
Imagining America through art

And the winner is…
Ang Lee received the 2006 Academy Award for “Best Directing” for the film, “Brokeback Mountain.”

Modernism redefined
“Bill Traylor, William Edmondson, and the Modernist Impulse,” included more than 60 drawings and 25 sculptures from private collectors and museums in an exhibition that sought to transform the artists to modernist from “outsider” or folk artists. The exhibition was organized by Krannert Art Museum at Urbana-Champaign, and traveled to Birmingham Museum of Art, Cincinnati Museum of Art, The Studio Museum of Harlem and The Menil Collection in Houston. The International Association of Art Critics honored the exhibition with a second place award for the Best Thematic Show Nationally. The exhibition also was favorably reviewed in the “New York Times” and “U.S. News and World Report.”

Book on sprawl gets attention
A new book on city development concludes that urban sprawl is neither a recent nor a distinctly American phenomenon. Instead, says UIC professor and author Robert Bruegmann, sprawl is a feature of the world’s oldest cities. The controversial analysis of “Sprawl: A Compact History” has caught the attention of book reviewers and commentators across the country. Bruegmann is professor of art history, architecture and urban planning.

Jazz artist joins faculty
Orbert Davis, recording artist, composer, conductor and educator, joined the UIC faculty as associate professor of performing arts. Davis is the founder of MusicAlive, which trains professional musicians to teach inner-city kindergarten through high school students while also using music to demonstrate language and math concepts and build life skills. Davis founded the Chicago Jazz Philharmonic, a 55-piece orchestra of jazz and classical musicians. The orchestra debuted a composition by Davis in Millennium Park last summer.

Partnering with the Smithsonian
The Urbana-Champaign campus is among a few universities accepted into the prestigious Affiliations Program of the Smithsonian Institution. The partnership has many benefits, says Scott Schwartz, director of the Sousa Archives and Center for American Music, a unit of the University Library, which applied for the affiliation with collaborator Krannert Art Museum. The program offers the university access to Smithsonian collections and expertise. Last year, Schwartz borrowed Sousa artifacts; this year, the Smithsonian Chamber Ensemble will perform and will lend rare Stradivarius instruments for exhibition.
Larry Schook says that the University of Illinois lets him think big and then act boldly. Take his latest project: leading a $20 million effort to sequence the swine genome. The undertaking is so large it will take seven institutions here and abroad working together to pull it off. The U.S. Department of Agriculture is supporting the project with a grant of $10 million.

“Our campus culture is to look for the next big thing,” Schook said. “There is a collective sense of collaboration and achievement for achievement’s sake, not because it will make us famous or anything, but because it’s what we do. There is an expectation that this is the kind of work we should be doing and our campus celebrates this.”

But why sequence the pig at all? Because, says Schook, the pig provides the closest side-by-side comparison to humans, except, of course, other primates. “This is the ultimate comparison,” says Schook, who notes that the pig genome being sequenced is an Illinois pig. Her formal name is No. 214, but she is known as T.J. Tabasco. “We’ve had the pieces for the human genome and the pig in a side-by-side comparison. But now we’ll be able to see how the various proteins in the genes work together to make, for example, a human toenail as opposed to a pig hoof.”

Schook and his colleagues ultimately will be able to determine the role of genes in diseases and understand the role genetics plays in “lifestyle diseases” such as obesity, diabetes and cardiovascular disease. Eventually, using the pig as a model, Schook — a faculty member of the new Institute for Genomic Biology — and other scientists will test theories of how to make the best of both our genes and our environment. Their findings will help humans live healthier, more productive lives, and enable farmers to raise healthier, happier pigs. The state of Illinois is the fourth largest pork producer; better pigs equal prosperity. There is no other animal being sequenced that serves both medicine and agriculture.

“The University of Illinois is the only place I could have done this project,” says Schook, who points to intellectual landmarks like the Center for Advanced Study and the Beckman Institute as examples of visionary, stimulating and interdisciplinary environments on the Urbana-Champaign campus. “You don’t see that in many places and it’s easy to take for granted,” he said.
Estrogen’s role in breast cancer
Benita Katzenellenbogen, Swanlund professor of cell and developmental biology at Urbana-Champaign, and Jonna Frasor, assistant professor of physiology and biophysics at UIC, found that human breast cancer cells exposed to estrogen showed a dramatic reduction in levels of an important regulatory protein known as N-CoR. This reduction, the research team suggests, enables certain types of cancer cells to grow and spread rapidly.

Studying the brain, cell by cell
Jonathan Sweedler has developed a new way to examine the interaction of billions of brain cells, advancing our understanding of how the brain works. Sweedler, Lycan professor of chemistry and director of the Biotechnology Center on the Urbana-Champaign campus, and members of his research group have dismantled a slice of brain tissue into single-cell-size pieces to observe signaling between cells, to see how chemicals are released during specific activities and understand how those chemicals affect brain cells.

Less expensive sequencing
Researchers from electrical and computer engineering, chemistry and physics at the Urbana-Champaign campus received a three-year grant from the National Institute of Health’s National Human Genome Research Institute to find ways to reduce the cost of sequencing DNA. With less expensive techniques, biomedical researchers and healthcare professionals will be able to more readily study the genetic components of such diseases as cancer, heart disease and diabetes.

Blood clotting
Polyphosphate—present in every living organism, but thought to be unimportant—speeds blood clotting and helps clots last longer, says research by James H. Morrissey, above, a biochemist in the College of Medicine on the Urbana-Champaign campus, and Roberto Docampo, a former pathobiologist at the College of Veterinary Medicine. Future research will investigate ways to use polyphosphate to treat battlefield wounds and for such diseases as hemophilia.

Exercise improves memory, mood
Want to age gracefully? Exercise, say Arthur F. Kramer and Denise Park, co-directors of the Center for Healthy Minds at the Beckman Institute for Advanced Science and Technology in Urbana-Champaign. They showed that in as little as six months, adults aged 60-75 years old who walked three hours a week increased their short-term memory. Edward McAuley, above, professor of kinesiology, also found that seniors who incorporated exercise into their lifestyles experienced physical as well as psychological improvements, which translates to an overall better quality of life.

Serendipity in the deep blue sea
Chris Mah, graduate student in geology at Urbana-Champaign, had the rare thrill of discovering a new species. The pumpkin-sized starfish, which Mah named Astrosarkus idipi, was found at 400 feet in Palau by a diver-scientist eight years ago, who sent it to Mah. With the help of two other specimens that Mah coincidentally found in museum collections, he was able to identify the previously unknown species.

Nurturing diversity
A new program in Chicago encourages diversity among undergraduates in the sciences. The ASCEND program, assisted by a National Science Foundation grant, identifies 50 students from among minorities and women at the Chicago campus who are considering, but are not fully committed to, a science or engineering major and offers team-building and other forms of academic support.

Like a Trojan horse
Taking a cue from the Trojan horse led Paul Hergenrother, a chemistry professor on the Urbana-Champaign campus, to find a new way to outwit drug-resistant bacteria. By inserting a naturally occurring molecule into an antibiotic-resistant bacterium, the molecule can destroy the machinery that manufactured the resistance. Antibiotic resistance makes it difficult to fight infection and increases the chances of patients getting a different infection while in the hospital. Student Dinty Musk, above, is on Hergenrother’s team.

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How do they do that?

How is it that birds can find their way from their winter homes to their summer homes every year without fail? As many as 30 years ago Klaus Schulten, left, professor of physics at Urbana-Champaign, suggested that birds’ ability to sense the earth’s magnetic field, which they read like a map, is based on a biochemical process in their brains. It turns out that this process is light sensitive and dependent on a newly identified, light-sensing protein called cryptochrome, confirming Schulten’s theory.

Brain at work

Does a puzzle a day keep aging away? Elizabeth Stine-Morrow, professor of educational psychology at Urbana-Champaign, is studying whether the creative problem-solving necessary for working puzzles will help keep seniors mentally fit. In related work, William Greenough, professor of psychology, has found that both physical and mental exercise enhances brain function and stimulates new neuronal connections; and Stan J. Colcombe, a fellow at the Beckman Institute for Advanced Science and Technology at Urbana-Champaign, discovered that changes in the white matter of the frontal lobes — more than a person’s age — can predict an individual’s ability to focus on tasks.

Intern’s paper presented to scientists

A third-grade teacher interning at Fermilab presented her paper at the American Association for the Advancement of Science meeting. Kristen Maier, a 2005 UIC College of Education graduate, who studied preferred habitats for Henslow’s sparrows and grasshopper sparrows, is the first teacher intern at Fermilab to have presented a paper. The Fermilab intern program helps future teachers increase their understanding of science by working at a national laboratory.

Flatworm informs

It is possible that the flatworm, known as planaria, holds clues to the biology of stem cells, long-term tissue maintenance and cell turnover that other experimental animals do not. Phil Newmark, left, professor of cell and developmental biology at Urbana-Champaign, with Ricardo Zayas, found 142 planaria genes that are associated with human disease. Planaria share some genes with humans that other animals do not, suggesting it will be an important, complementary model for studying gene function.

First do no harm

A professor of chemical and biomolecular engineering has made a human estrogen receptor cell highly sensitive to a specific, synthetic molecule. The receptor is now 100 million times more receptive to that molecule than any other. Huimin Zhao’s technique is faster and more accurate than one published previously and sets the stage for designing very targeted drug delivery systems and other genetically based medical therapies. Zhao is also a member of the Institute for Genomic Biology at Urbana-Champaign.

Good fellow

Theoretical chemist Todd Martinez was named a 2005 MacArthur Fellow by the John D. and Catherine T. MacArthur Foundation. Selected for creativity, originality and potential, MacArthur Fellows receive $500,000 over five years with no strings attached. Martinez has focused his research at Urbana-Champaign on understanding the reactions of molecules in ultrafine detail: to specify exactly how atoms move in space and how the energies of molecules change over time.

AAAS fellows

UIC engineering dean Prith Banerjee and seven faculty members at the Urbana-Champaign campus were elected fellows of the American Association for the Advancement of Science. Banerjee joins professors David Clayton, Evan DeLucia, Dana Diott, Ravishankar Iyer, Deborah Leckband, Lawrence Schook and John Weaver as new fellows. The AAAS, the world’s largest general scientific society, publishes the journal “Science.”
Learning

HUMANITIES
from History

Abe Lincoln as Teacher

What can the past teach us about the future? Plenty, if that historic view includes the wisdom of Abraham Lincoln, says Phillip Shaw Paludan, the Naomi B. Lynn Distinguished Chair in Lincoln Studies at UIS.

“His achievements set a standard that continues to define us as a nation,” Paludan said. Lincoln’s powerful rhetoric shaped the public’s understanding of the human condition, appealing to the “better angels of our nature” to end slavery and preserve the Union.

One of the nation’s foremost historians on Lincoln and the war between the states, Paludan’s career-long work interprets the legacies of the Civil War era: the political-constitutional history, the enduring social and economic impact and Lincoln’s presidential legacy. “To fully understand Lincoln, we need to place him in his world, a time of the most important issues our young country faced—including our first collective experience with the issue of race,” Paludan said.

Paludan has written or edited six books on 19th century American history, including The Presidency of Abraham Lincoln, which won him the prestigious Lincoln Prize awarded by the Lincoln and Soldiers Institute. He sees no better place to share Lincoln’s legacy than where the statesman spent most of his life. To do so, Paludan inaugurated two lecture series that bring renowned scholars to UIS for talks attended by more than 600 members of the university and community. Focusing on an annual theme, the Lincoln Legacy Lecture series has addressed race issues, economic thought and political ethics.

In his teaching, Paludan quotes a variety of thinkers beyond Lincoln—including Aristotle, Shakespeare, Robert Frost, Mies van der Rohe—to instill a respect for the complexity of problems in historical circumstances. But he feels the 16th president’s words still offer the greatest lessons.

“When people ask me why we need another book on Lincoln, I often answer, ‘Why do we need another performance of Hamlet?’ The man still has a lot to say.”

Phillip Shaw Paludan

Education
B.A., M.A. Occidental College
Ph.D. University of Illinois at Urbana-Champaign

Honors
Barondess/Lincoln Award, Civil War Roundtable of New York
The Lincoln Prize, Lincoln and Soldiers Institute
Lincoln Diploma of Honor, Lincoln Memorial Library
Honorary Doctor of History, Lincoln College

Joined the U of I 2001

Other Pursuits
U of I and University of Kansas basketball fan
Film buff
1940s and 1950s music

Making History

The University of Illinois Library owes its character and prominence to Katharine Sharp, one of the first head librarians. In addition to tripling the size of the Library collection during her decade of leadership, Sharp—a protégé of Melvil Dewey, father of the classification system bearing his name—directed the first Library School at the University of Illinois in 1897. The Midwest’s first and only the United States’ fourth, the school quickly won a reputation as one of the best in the nation. Today, the Library is the world’s third largest public university collection and the Graduate School of Library and Information Science continues to be the country’s top-ranked school.
A 2,000-year-old mummy plays a key role in a new mystery novel by Sarah Wiseman, director of the ancient technologies and archaeological materials program at Urbana-Champaign. The setting of "Bound for Eternity: A Lisa Donahue Mystery," bears a striking resemblance to the former World Heritage Museum, now inside the Spurlock Museum. "The Virtual Mummy" (published in 2003 by U of I Press) is Wiseman's factual account of her research team's analysis of the Roman-era child mummy.

Members of the U.S. House of Representatives throughout its 200-year history are the subjects of Robert Remini's latest project. Named the official historian of the House, Remini is completing a commissioned narrative history that reveals its inner workings. The UIC emeritus professor of history was appointed in 2005 by House speaker Dennis Hastert (R-III) and is only the third person to hold the position.

In “More Than a Bus Ride: Desegregating Champaign Schools,” students from Champaign’s Franklin Middle School captured oral histories of 1968 desegregation experiences from Champaign residents and turned them into a documentary on school desegregation aired by public radio station WILL at Urbana-Champaign. Shanika Taylor, left, and Jasmine Brown participated in the project.

Official historian for Congress

Great Cities Institute

The founder and executive director of The HistoryMakers, an African-American oral history archive, Julieanna Richardson, was awarded the first Vernon Jarrett Fellowship from the UIC Great Cities Institute. An advocate for social change and leadership by African-Americans, Jarrett was a Great Cities fellow from 1996 until his death in 2004. As the first fellow, Richardson will carry on the legacy of engagement, sharing her knowledge of black history with students, faculty and staff while guiding the long-term agenda for the fellowship.

Video games and aggression

Fantasy violence in online role-playing games leads to aggression — right? Wrong. Contrary to popular opinion and most previous research, a study by Dmitri Williams found players observed in real settings did not increase their argumentative behaviors after game play. Williams, a speech communications professor at Urbana-Champaign, says some researchers believe video-gaming leads to substantial gains in learning teamwork, managing groups and problem solving.

Library donations

A collection of many rare Romanian publications, most written since the fall of dictatorship in 1989, was donated to the Library at Urbana-Champaign by Andrei Codrescu, the prolific poet-novelist-essayist. Leon Dash Jr., Pulitzer-prize winning journalism professor at Urbana-Champaign, donated materials related to his career reporting on war, urban poverty and teenage childbearing to the Library’s strong collection in the history of journalism. Assistant archivist Chris Prom, above, works with the Dash papers.
Leading language
Gerald Graff, professor of education and English at UIC, has been elected president of the Modern Language Association effective in 2008. Graff, a distinguished historian and analyst of the academic profession, is known for his examinations of trends and issues in teaching and curriculum. The MLA promotes the study and teaching of language and literature and has more than 30,000 members in 100 countries.

First female math journal editor
Susan Friedlander is the first woman to be named editor in chief of the “Bulletin of the American Mathematical Society.” The top-ranked journal includes articles of interest to a wide mathematical audience. Friedlander, professor of mathematics, statistics and computer science at UIC, is a widely respected specialist in the fields of mathematical fluid dynamics and partial differential equations.

Partnering to read
Partnership READ (Reading Essentials and Assessment Development), a project of the UIC College of Education, directed by education professor Taffy Raphael, above, received the American Association of Colleges for Teacher Education 2005 Best Practice Award for Effective Partnerships. Partnership READ collaborates with Learning First, a project of the Chicago Public Schools, on school-wide literacy efforts and has contributed to steady gains in student achievement.

American literary history
Gordon Hutner, founding editor of “American Literary History,” has brought the pre-eminent journal for traditional and new scholarship on American cultural studies to Urbana-Champaign. The first issue from its new home is dedicated to Nina Baym, a 41-year faculty member of the Urbana-Champaign English department who has garnered every major U of I award: Swanlund Endowed Chair, Jubilee Professor of Liberal Arts and Sciences and Center for Advanced Study Professor of English. She also won the Hubble Award for lifetime achievement from the Modern Language Association.

Best new literary journal
The highly experimental literary magazine, “Ninth Letter,” has been named Best New Literary Journal by the Council of Editors of Learned Journals, an allied organization of the Modern Language Association. In addition, several stories in the magazine were selected for the anthology, “The Best of American Short Stories.” The journal is published by the Creative Writing Program in the English department in collaboration with the School of Art and Design at the Urbana-Champaign campus.

Reality TV
Investigations conducted by Bill Clutter of the Downstate Illinois Innocence Project on possible wrongful convictions for two murders in Illinois were featured on both The Discovery Channel and “48 Hours” on CBS. One resulted in an overturned sentence, while another is under appeal. Rubin “Hurricane” Carter, left, who served prison time following a wrongful conviction, congratulates UIS chancellor Richard Ringeisen. The Downstate Innocence Project, affiliated with the UIS Institute for Legal and Policy Studies, provides research and investigative assistance to individuals who have been arrested, tried, found guilty and imprisoned for crimes the Project believes they did not commit.
Tackling the Profound at the Edge
Fundamental Science Brings Technological Innovation

Physicist Nigel Goldenfeld keenly appreciates the stature of the department he joined in 1985. “When I started, John Bardeen was here with the pre-eminent experimental and theoretical faculty in condensed matter physics,” says Goldenfeld. “It is still considered the world’s best group of scholars in that field.”

Being at the University of Illinois at Urbana-Champaign has enabled Goldenfeld to tackle some of the meatiest questions there are, including the nature of fluid turbulence and the origin of biological complexity. He is a principal investigator on both a five-year grant from the National Science Foundation and a three-year grant from the U.S. Department of Energy to understand how life first began. The multi-institution, interdisciplinary project includes geophysicists, microbiologists, biochemists and chemists.

Although Goldenfeld works in condensed matter physics, he is increasingly interested in problems tied to biological complexity, ecology and evolution. And, because Goldenfeld studies the ability of inanimate objects to self-organize, (he determined, for example, the basic mechanisms that govern the shape of snowflakes) he is positioned to help determine how life started from Earth’s early environment. This project hopes to determine how the first molecules enabling metabolism were created from a completely lifeless Earth and how those molecules created life as we know it.

This elemental work stands to pay off, not just in greater understanding, but also in technological advances down the road, Goldenfeld said. His work ultimately could play a part in technological innovations such as better fuels and improved drugs. But, he says, the goal is fundamental understanding.

“Take John Bardeen as an example,” said Goldenfeld. “On the one hand, he was doing basic research in seemingly esoteric quantum mechanics, and on the other hand, what he did started the whole semiconductor industry. We’ve learned time and time again that out of deep fundamental science always comes technological innovation.”
More spinning in the middle
After a nine-year debate, there is now proof that the Earth’s iron core rotates faster than its surface, by about .3 to .5 degrees per year. Xiaodong Song, professor of geology at Urbana-Champaign, used historical seismic wave data spanning 35 years to detect the changes.

Shedding new light on evolution
After comparing eight species using Evolution Highway—a data visualization and analysis cyberservice built by the National Center for Supercomputing Applications—researchers at the Urbana-Champaign campus discovered that evolution has been moving faster for the last 65 million years than it did for the previous 35 million. Their findings were published in the journal “Science.”

Building blocks
Yoshitaka Ishii’s work at the Chicago campus to better understand the building blocks of nanomaterials was recognized with a prestigious National Science Foundation grant for young professors. Ishii hopes to develop new methods of studying these materials at the molecular and atomic levels, opening the possibility of creating nano-scale electronic circuits and artificial photosynthetic systems, as well as revealing unknown molecular mechanisms in the development of Alzheimer’s disease.

Preventing infectious disease
Tony Goldberg and Thomas Gillespie, veterinary medicine faculty at the Urbana-Champaign campus, are leading a broad research program to examine how diseases leap from animals to humans in tropical forests and how human activity affects the emergence of new infectious diseases. Ugandan field workers, above, aid the project.

Babies understand earlier
Babies as young as 15 months begin to understand that beliefs are only representations of reality and can be true or false, an ability previously thought to develop at the age of four years. The study by Renée Baillargeon, professor of psychology at the Urbana-Champaign campus, and published in “Science,” could lead to an earlier screening tool for autism.

Color coded
Yi Lu, a chemistry professor at the Urbana-Champaign campus, has developed a simple test for detecting hazardous levels of lead by attaching DNA molecules to gold nanoparticles. The nanoparticles interact with other, specially designed pieces of DNA, arranging into clumps that appear blue. The presence of lead causes the connected DNA to fall apart, loosening the individual gold nanoparticles and changing the color from blue to red.

Novel prosthetic
Laxman Saggere, professor of mechanical engineering at the Chicago campus, received a National Science Foundation CAREER Award for his novel proposal to improve retinal prostheses. The technology, which uses chemicals rather than the more common approach of electrical stimulation, represents a fundamentally different approach to stimulating photoreceptor cells.
High-intensity ultrasound
Kenneth Suslick, professor of chemistry and materials science and engineering at Urbana-Champaign, developed a “sonochemical” procedure using high-intensity ultrasound with potential applications for creating the types of hollow, nanostructured particles useful in microelectronics, drug delivery and as catalysts for making environmentally friendly fuels.

Fighting SARS
A prototype drug developed at the Chicago campus shows promise in slowing the replication of the virus responsible for severe acute respiratory syndrome, or SARS. Researchers are Michael Johnson, above, director of the Center for Pharmaceutical Biotechnology, Andrew Mesecar, professor of pharmacy, and Arun Ghosh, professor of chemistry.

New best friend
The peer method, shown effective in educational psychology research for studying and problem solving, is guiding Chicago campus researchers in developing a computer program “buddy system.” Software will conduct and monitor a conversation with a student, steering it toward more productive paths when it goes off course. Researchers hope the program will particularly appeal to women, who are a minority in the computer science field.

Got game?
A video game developed at the Chicago campus simulates biological, chemical, radiological and natural disasters in major metropolitan areas to prepare public health workers and emergency responders for real life emergencies.

Preparation for disasters
Bees, ants and viruses are providing researchers with cues to improve human disaster response. A research team of biological, computer and social scientists and civil engineers from the Urbana-Champaign campus is looking at how bees and ants self-organize based on local information, and how viruses spread. Noshir Contractor, left, and Feniosky Pena-Mora are the lead investigators.

Scholarship on deposit
A multi-year project of the University Library and Campus Information Technologies and Educational Services at Urbana-Champaign is creating a new repository of faculty publications. Aided by preservation librarian Thomas Teper, above, the free digital storehouse offers permanent worldwide access to faculty works, increasing visibility.

Bees create a buzz
With their complex system of cooperation and communication, honeybees will star in a new research facility on the Urbana-Champaign campus. Feniosky Pena-Mora, professor of civil and environmental engineering, and Gene Robinson, left, professor of integrative biology, are principal investigators in a project to examine the genetic basis of the bees’ social behavior.

Super fast data
It won’t be long before grandparents in Montreal can watch their grandchild’s school play in St. Louis using a video cell phone. Research led by Nick Holonyak, Jr. and Milton Feng, professors of electrical and computer engineering at Urbana-Champaign, has produced a transistor laser—which combines both electrical and optical signals—that can send and receive three DVDs’ worth of data per second.
“Start small, but dream big” should be Aida Giachello’s motto. What began in 1993 as an idea to improve the quality of health care delivery to Latinos in the Midwest today is the Midwest Latino Health Research, Training and Policy Center at the Jane Addams College of Social Work. Serving a 10-state region, the center received international recognition for its model participatory research approaches and brought Giachello honor in 2005 as one of “Time” magazine’s top 25 Latino leaders in the nation.

“A lot of our work has to do with developing partnerships and building trust,” says Giachello. A long-time activist for health and social work issues, she believes the community needs to be an equal partner in collecting data, assessing social and medical needs and developing plans to combat health problems that disproportionately affect the Midwest Hispanic population.

The center has trained hundreds of undergraduate, graduate, pre- and postdoctoral students, social workers, health care professionals, community leaders and even high-school students doing community service, in participatory research. The range of trainees demonstrates Giachello’s passion for creating partnerships between universities and community organizations. Many of her former students are in leadership roles using research and policy skills learned at the center to work for other organizations.

“Research allows you to dream; to say, ‘How could I make this a better community while at the same time mobilizing residents around health, training them in research, engaging them in community action as a result of the findings and developing best practice intervention approaches?’ It’s essential to have the community’s interest at heart and to use research for individual, family, community and system change.”
Giant grass as fuel source

It sounds like science fiction, but a non-invasive grass could become a renewable clean fuel source. Stephen Long, the Robert Emerson professor of crop sciences and plant biology at Urbana-Champaign, believes that Giant Miscanthus has that potential. A more efficient energy source than other plant-derived fuels such as ethanol, the grass is also easy to grow, as shown by Emily Heaton, a student in Long’s research group.

Enhanced learning opportunities

Low-income high school students in Springfield are getting the tools they need to promote college readiness. Through two GEAR UP partnership programs at UIS, students at Lanphier High School receive access to instructional technologies and academic enrichment programs in math, science, reading and technological literacy. A related UIS online mathematics teaching certification program assists with secondary education course development and support.

Oral health care advocate

“Ebony” magazine named Dr. Aljernon Bolden, clinic chief of public dentistry at UIC, as one of the nation’s 100 Most Influential Black Americans. Bolden also directs the UIC College of Dentistry’s extramural program that mobilizes fourth-year dental students to provide oral health care for underserved patients in community clinics throughout Illinois.

Supercomputing to the rescue

As polluted floodwaters covered the coastline after Hurricane Katrina, hazardous materials officials needed accurate water movement forecasts. Marine scientists at the University of North Carolina-Chapel Hill volunteered a computerized three-dimensional modeling program, but needed a month to run calculations. The National Center for Supercomputing Applications on the Urbana-Champaign campus provided the necessary computing capability, completing the task in about 15 hours.

CeaseFire

CeaseFire, an initiative of the UIC School of Public Health, partners with community-based organizations to prevent and reduce violence, lowering gun-related deaths an average of 44 percent in Chicago neighborhoods that use the program. Operating in 20 Illinois communities under the direction of Gary Slutkin, right, CeaseFire was praised by First Lady Laura Bush.

Safe haven for pets

A Pet’s Place, a student-run program of the College of Veterinary Medicine at Urbana-Champaign, was founded to house pets of domestic abuse victims residing at local women’s shelters. After Hurricane Katrina, the program also welcomed the pets of storm victims, prompting a few displaced families to relocate to Champaign-Urbana in the process.

Old tires still work
Nearly 280 million tires are discarded annually in the United States. A study by civil and environmental engineering professors Timothy Stark at Urbana-Champaign and Krishna Reddy at UIC shows that placing shredded tires on top of landfills offers cost-effective drainage and benefits the environment.

Cancer prevention
What you know about environmental carcinogens in air, water, food and the workplace may reflect the work of Dr. Samuel Epstein, professor emeritus of environmental and occupational medicine in the UIC School of Public Health. A leading authority and champion of cancer prevention issues, Epstein received the Albert Schweitzer Golden Grand Medal for Humanitarianism for his lifelong work to inform the public about avoidable cancer risks and to influence governmental policy.

Gulf region volunteers
More than 400 health care professionals from UIC and two other Chicago hospitals volunteered with hurricane relief efforts in the gulf region, helping reopen damaged hospitals and filling in for medical staff.

New sports wheelchair
Wheelchair athletes like Brandi Zimmerman, left, will find it easier to maneuver if the Balance Sport Wheelchair comes to market. The chair gives users the hands-free ability to break and turn and can be retrofitted to meet individual physical needs. Eric Larson, right, was part of an industrial design class at Urbana-Champaign that developed the prototype recognized by the National Collegiate Inventors & Innovators Alliance.

Expanding services in Cook County
A $5 million state appropriation will assist University of Illinois Extension in directing U of I resources and expertise toward high-priority issues identified by businesses, families, education systems and individuals in Cook County.

Fishing for answers
In Illinois, fish from 13 lakes have tested high enough in methylmercury to prompt alerts about eating them. Urbana-Champaign environmental chemist Robert Hudson and former student Chris Shade have developed a faster and less expensive technique to test for methylmercury than the current practice of monitoring fish.

Arts help HIV/AIDS patients
Julia Kellman, an art educator and researcher in the departments of art and design and medicine at Urbana-Champaign, began expressive arts classes for hospitalized HIV/AIDS patients to provide them with ways to deal with their diagnosis. This is one patient’s work.
Stretching the Cutting Edge
Cutting Edge

Re-inventing Silicon Provides Breakthrough Technology

Kiss your hard-sided computer good bye. John Rogers has figured out how to make one of its key components — silicon, normally brittle and stiff — become both flexible and stretchable. In this and other projects, Rogers’ work is aimed at transforming society.

“There are all kinds of opportunities here,” says Rogers, who was selected as one of the 2005 Scientific American 50 because of his research into the structure and behavior of organic semiconductors. Rogers, who came to Illinois in 2003 by way of MIT, Harvard University and Bell Labs, credits the intellectual climate at the University of Illinois for his productivity.

“We like to select interesting scientific problems whose solutions have the potential to lead to technologies with very broad impact on society,” says the professor of materials science and engineering at Urbana-Champaign.

One field of electronics is turning away from the “small is beautiful” to the “bigger is better” approach. Examples: computer monitors and television screens. The questions Rogers seeks to answer are: How do you handle a large area? How do you print circuits in a large and distributed area? And how do you create lightweight and flexible bases that bond with silicon? One answer Rogers supplied is to print circuits the way you’d print a newspaper, with stamping-based patterning techniques and ink-based electronic material rather than the conventional techniques that are well developed for wafer-scale size but not for bigger uses. This method is also less expensive. Besides displays that can be folded or rolled when not in use, stretchable silicon could be used in sensors and electronics for artificial muscles or biological tissues, structural monitors wrapped around aircraft wings or stretchy skins for integrated robotic sensors. These widespread applications led “Technology Review” magazine to tap Rogers’ discovery as one of the top 10 emerging technologies.

“We do a lot of collaborative work and the University, besides being the best in science and engineering, has a diverse faculty and is configured in a way that encourages collaboration.”

John A. Rogers

Education
B.A., B.S. University of Texas at Austin
S.M., Ph.D. MIT

Honors
Scientific American 50
R&D 100 Innovation Award (2002, 2001)

Joined the U of I 2003

Other Pursuits
Playing basketball
Hiking
Keeping up with his 3-year-old son

MAKING HISTORY

The U of I produced a pioneering computer called Illiac I in 1952. At that time, only Princeton and the U of I had the necessary federal approval to build computers. With the computing power of today’s handheld calculator, Illiac had 2,800 vacuum tubes and weighed 10,000 pounds. Four years later, University engineers and scientists unveiled the next generation of Illiac, which had more computing power than all of Bell Lab’s systems. This success paved the way for the Urbana-Champaign campus to be named one of the nation’s five supercomputing sites in 1985.
National energy assistance
The United States Department of Energy is relying on assistance from UIC’s Energy Resources Center to implement high technology advances in energy efficiency for the national chemical industry. In addition to managing natural gas purchasing for the State of Illinois and serving as an energy adviser to the Illinois Department of Central Management Services, the center is using a federal grant to develop a Midwest energy efficiency and renewable resources network.

What’s in there?
Want to know what’s in your cuppa joe? Kenneth Suslick, the Marvin T. Schmidt professor of chemistry at Urbana-Champaign, developed a sensor array of 36 commercially available dyes that respond to various chemical properties, such as pH. The array works for any water-based mixture and could be used in quality control of soft drinks, for example.

Robot fingertips
A team led by Chang Liu, above, and Douglas Jones, electrical and computer engineering professors at Urbana-Champaign, is designing a set of sensors, combined with a powerful signal-processing algorithm, to help robots identify and manipulate objects more easily. The sensors simulate human fingertips, enabling robots to handle items such as eggs without crushing them.

Open wide
UIC engineering professor Pat Banerjee and graduate student Cristian Luciano are working with dentists to develop a prototype virtual dental teaching tool that feels real. The dental simulator uses technology developed by UIC’s Electronic Visualization Laboratory.

Nanotubes build strong bones?
Michael Strano, professor of chemical and biomolecular engineering at Urbana-Champaign, developed carbon nanotubes—the strongest human-made material at the molecular level—that provide a scaffold to help broken bones heal. The scaffold can be specially treated to encourage bone to grow in places where it has disintegrated.

Plastics, heal thyself
Scott White, right, the Donald Biggar Willett professor of aerospace engineering at Urbana-Champaign, is collaborating with a Duke University engineering professor to create self-repairing skins for airplanes and automobiles.

Blogging all farmers
University of Illinois Extension has gone digital with a blog for farmers called The Farm Gate. www.farmgate.uiuc.edu

Computing power
With the addition of the Tungsten2 and Cobalt computational systems, the National Center for Supercomputing Applications at Urbana-Champaign provides more than half of the high-end computing resources supported by the National Science Foundation in the United States. NCSA has 1,100 users nationwide and another 320 users in 44 departments on the Urbana-Champaign campus.

Protecting the grid
The Urbana-Champaign campus will be the home of a National Science Foundation-funded center to protect the nation’s power grid. The Trustworthy Cyber Infrastructure for the Power Grid will make it more secure, reliable and safe.

Tiny vision
Researchers led by Urbana-Champaign bioengineering professor Eric Jakobsson are developing a nano-sized battery that one day will be implanted in the eye to power an artificial retina. The battery is part of an effort to design, model and make nanomedical devices.
Bioengineered tissue
A research team led by UIC bioengineering professor Michael Cho is creating artificial skin and eye tissue to investigate whether Pentagon-developed electromagnetic energy technology holds potential as a non-lethal crowd-control device that military troops could use safely.

Nanotechnology in agriculture
Researchers in the College of Agricultural, Consumer and Environmental Sciences and the College of Engineering at Urbana-Champaign are collaborating on nano-scale techniques to understand how diseases behave in plants, how to take a genetic approach to disease prevention and how to develop a grain tracking system from the field to the processor.

The how of hydrogen
Computer simulation led by Klaus Schulten, left, Swanlund professor of physics at Urbana-Champaign, helps researchers understand how hydrogen fuel is made. The simulation shows how hydrogen and oxygen travel to an enzyme’s catalyst site, where the hydrogen is converted into energy. The finding could help solve a long-standing economic problem in developing hydrogen fuel.

Argonne alliance
UIC is collaborating with the University of Chicago and Northwestern University to enhance Argonne National Laboratory’s scientific capabilities, strengthen the state’s technological base and workforce preparation and to improve Illinois’ ability to receive federal research funding. As part of the new alliance, President B. Joseph White will serve as a member of the executive committee of the Argonne Board.

Swimming blind
Scientists at the Urbana-Champaign campus developed a navigational aid for robots and remote sensors using fish as a model. Fish have a sensory organ called a lateral line, enabling them to find their way through murky waters to spot obstacles, predators and prey. Electrical engineer Chang Liu and entomologist Fred Delcomyn have developed an artificial lateral line that could give underwater vehicles and robots this same ability.

Fighting bird flu
The National Center for Supercomputing Applications at Urbana-Champaign is collaborating with a National Institutes of Health partner to develop computer models of how infectious diseases spread. The models are useful to policymakers, public health workers and other researchers in better understanding and responding to emerging infectious diseases.

Cool tanks
Predrag Hrnjak, mechanical and industrial engineering research professor at Urbana-Champaign, developed a high-performance, environmentally responsible cooling system using naturally occurring carbon dioxide as a refrigerant. The CO₂ system produces higher capacity cooling at a lighter overall weight and in a more compact package than the existing system.

GeoWall opens the world
Creators of the immersive, three-dimensional display CAVE system at the Chicago campus have created a simpler visualization system using off-the-shelf computer parts. GeoWall, developed by computer science professor Jason Leigh at the Electronic Visualization Laboratory at UIC, helps dozens of students at one time visualize geologic features in three dimensions. More than 400 of these systems operate at schools and colleges across the country.
B. Joseph White became the 16th president of the University of Illinois in January 2005, an event celebrated with an official inauguration ceremony in September. White immediately set in motion a university-wide strategic planning process to chart the university’s course for the next decade.

Richard Herman was named chancellor of the Urbana-Champaign campus in April 2005. He joined the U of I in 1998 as provost and vice chancellor for academic affairs at Urbana-Champaign. Herman is a leader in national discussions on how to transform public research universities and the land-grant mission to meet the needs of the 21st century.

Linda P.B. Katehi, former dean of engineering at Purdue University, was named provost and vice chancellor for academic affairs at Urbana-Champaign in April 2006. As chief academic and budget officer for the campus, Katehi hopes to foster an environment encouraging interdisciplinary research, innovation in education and diversity.

30 years
Public radio station WUIS and “Illinois Issues,” a monthly publication, celebrated 30th anniversaries in 2005. WUIS is a member station of NPR. “Illinois Issues” focuses on analysis of public policy, Illinois government and politics. Both are part of the Center for State Policy and Leadership at UIS.

60 years
The Institute of Labor and Industrial Relations celebrates its 60th anniversary in 2006. The institute’s advanced degree programs focus on employment relations including industrial relations, economics, business administration, psychology and law. The program began at Urbana-Champaign and also offers programs at UIC.

50 years
August 1, 1955, marked the inauguration of WILL-TV’s broadcast service in Urbana-Champaign. The College of Nursing celebrated notable accomplishments of the last 50 years. UIC was the first public institution in Illinois to offer a curriculum leading to a bachelor of science in nursing. The program later added a master of science in nursing, the first Ph.D. program in Illinois and the country’s first graduate program in nurse midwifery. Designated as the first World Health Organization Collaborating Centre for Nursing and Midwifery in the U.S., the college includes locations in Peoria, Rockford, the Quad Cities and Urbana.

40 years
Richard J. Daley presided over the opening of the University of Illinois at Chicago, which the late mayor called his “greatest contribution to the life of the city.” The Chicago campus on the city’s Near West Side replaced the Navy Pier campus, which celebrated its 60th anniversary by inducting nine alumni into the Navy Pier Hall of Fame. The Navy Pier campus opened in 1946 as a two-year undergraduate division to educate GIs returning from World War II.

75 years
2006 marks the 75th anniversary for the College of Fine and Applied Arts, composed of schools of architecture, art and design and music; departments of theater, dance, landscape architecture and urban and regional planning; Japan House, Krannert Center for the Performing Arts, Krannert Art Museum, I space Gallery in Chicago and the East St. Louis Action Research Project.

100 years
The classics department at Urbana-Champaign organized an exhibition and day-long celebration for its 100th anniversary. Established in 1905 when the departments of Greek and Latin were combined, the classics department is one of the oldest in North America.
Recognizing excellence

Interdisciplinary medicine
The new UIC College of Medicine Research Building houses basic and clinical researchers in medicine, physiology and biophysics, obstetrics and gynecology, pharmacology, urology, microbiology and immunology, anatomy, neurology, pathology and surgery.

Dedication of gateway plaza
UIC honored former trustee and friend Earl Langdon Neal by naming the South Campus gateway in his honor. Artist James Turrell designed the plaza and Skyspace, a freestanding elliptical observatory framing the sky, as part of the transformation of the old Maxwell Street Market area.

Innovation award
John Unsworth, dean of the Graduate School of Library and Information Science at Urbana-Champaign, received the National Humanities Center’s 2005 Richard W. Lyman award for innovative use of information technology.

Magazine excels
“Illinois Issues” magazine writers received awards for excellence in state government reporting from the Association of Capitol Reporters and Editors, now called capitolbeat. Pat Guinane, the magazine’s Statehouse bureau chief, received two first-place awards and a second-place award. Columnist Charles N. Wheeler III received a first-place award. “Illinois Issues” is published by the UIS Center for State Policy and Leadership.

Asian American Center opens
Focusing on the concerns of Asian American students, staff and faculty, as well as serving as a resource for the broader UIC community is the goal of the Asian American Resource and Cultural Center, which opened in April 2005.

Hall of famer
Brad Hedrick, director of disability resources and educational services on the Urbana-Champaign campus, was inducted into the National Wheelchair Basketball Association Hall of Fame. Hedrick has been an active participant and supporter of the NWBA for more than 30 years.

Honors for poet
Anne Winters, UIC associate professor of poetry, received the 2005 Lenore Marshall Poetry Prize and the 2005 William Carlos Williams Prize for her latest work, “The Displaced of Capital.” Winters’ poems offer themes of social justice for the poor, homeless, immigrants and those emotionally excluded in her native New York City.

News honor

Contributions to the arts
Dianne Harris, associate professor of landscape architecture at Urbana-Champaign, received the 2006 Iris Foundation Award for outstanding contributions to the decorative arts, art history and cultural history.

Science star
UIC psychiatrist Bennett Leventhal received the Star of Science award from Children’s Brain Research Foundation for contributions to diagnosing and caring for children and adolescents with brain disorders and injuries.

Four-year first
The University of Illinois at Springfield became a full four-year university for the first time in its 35-year history when the Board of Trustees approved a new general education curriculum. UIS offers 42 degree programs: 21 bachelor’s, 20 master’s and one doctorate.

Crowning achievement
“Ilio,” the Urbana-Champaign campus yearbook, won a Gold Crown Award from the Columbia Scholastic Press Association.
Outstanding commitment
Cynthia “Cee” Barnes-Boyd received the Illinois Outstanding Nurse Leader Award for her commitment to reducing health care disparities among the least served populations in the Chicago area. Barnes-Boyd is assistant dean in the UIC College of Nursing and director of the UIC Neighborhoods Initiative in the Great Cities Institute.

Visionary award
In recognition of Susan Scrimshaw’s work to raise awareness of public health issues in Chicago and throughout the world, the UIC School of Public Health dean received the Visionary Award from Community Health, a volunteer-based health care clinic on Chicago’s near west side. Community Health partners with UIC medical students to operate a clinic that provides 6,500 patients annually with free medical care.

Illinois humanities awards
The UIC Library received an Illinois Humanities Council grant for its first major external programming project: Caribbean Stories: The Art of Life, organized by Jay Lambrecht. Sharon Snyder, UIC assistant professor of disability and human development, received a grant for the Chicago Disability History exhibition. Leon Fink, above, UIC distinguished professor of history, received a grant for continuing efforts on the Chicago Labor Trail project.

Educator leadership
Dr. Georges Bordage, a UIC professor of medical education, was recognized for crafting what is internationally regarded as the premier program for training health professions educators. Bordage received the Abraham Flexner Award for Distinguished Service to Medical Education by the Association of American Medical Colleges.

High-ranking center
The world’s most advanced nuclear magnetic resonance machine is housed in the new Structural Biology Center at UIC, making it one of the nation’s top five centers in structural biology.

Guggenheim fellow
Ian Agol, UIC associate professor of mathematics, statistics and computer science, won a fellowship from the John Simon Guggenheim Memorial Foundation to pursue research on three-manifold topology.

Grant fellow
Deborah Gorman-Smith was one of six appointed as the first William T. Grant Foundation Distinguished Fellows. Gorman-Smith is a professor of psychology in psychiatry at UIC.

Sloan fellow
Dhruv Mubayi is one of 116 outstanding young American and Canadian scientists and economists to win a 2005 Sloan Research Fellowship. Mubayi is a UIC assistant professor of mathematics, statistics and computer science.

Humanities fellows
The National Endowment for the Humanities awarded grants to Christopher Boyer, associate professor of history and Latin American and Latino studies at UIC, and Sydney Halpern, professor of sociology at UIC.

Fulbright distinguished chairs
Eric Arneson, professor of history and African-American studies at UIC, and Kevin Barnhurst, professor of communication at UIC, above, were selected for the Fulbright Distinguished Chair program.
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- **Sidney Micek, Ph.D., President, University of Illinois Foundation**

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**Prize-winning tradition**
Twenty-one men and women affiliated with the University of Illinois—faculty and alumni—have earned 22 Nobel Prizes dating from 1943 to 2003, the year two current Urbana-Champaign faculty members won.

Additionally, two graduates of University High School—physicist Philip Anderson and economist James Tobin—are Nobelists.

John Bardeen, who won Nobel Prizes in 1956 and 1972, remains the only double physics prize winner.

In 2003, Paul Lauterbur, a pioneer in the use of magnetic resonance imaging, shared the Nobel Prize in physiology or medicine and Anthony Leggett shared the Nobel Prize in physics for work in superconducting and superfluids. Both remain active on the Urbana-Champaign faculty.

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CHILDREN
Activities www.urbanext.uiuc.edu/family/index.html
4-H and youth web.extension.uiuc.edu/state/youth.html

COMMUNITY AND ECONOMIC DEVELOPMENT
communitydevelopment.uiuc.edu/webworks/files/index.php

U OF I EXTENSION
web.extension.uiuc.edu/state/index.html

FAMILY
Building stronger families www.urbanext.uiuc.edu/familyworks/time-dove.html
Parenting and seniors www.urbanext.uiuc.edu/family/index.html
Research information network for women and girls in Illinois www.uic.edu/orgs/rin/

FINANCIAL MATTERS
Consumer and family economics www.ace.uiuc.edu/cfe/index.html
Home and money www.urbanext.uiuc.edu/home/index.html
Working woman’s guide to financial security www.urbanext.uiuc.edu/ww1/index2.html

HEALTH
Health IQ uimec.discoveryhospital.com/main.php?t=hiq&p=start
Body Mass Index calculator uimec.discoveryhospital.com/calc.php?p=bmi
Discovery Hospital uimec.discoveryhospital.com/index.php
Ready when you are (lifestyle changes) uimec.discoveryhospital.com/main.php?t=symptom&p=ready_when_you_are
Symptom manager uimec.discoveryhospital.com/main.php?t=symptom&p=symptom_manager

HOBBIES
Bird watching www.inhs.uiuc.edu/cbd/collections/birds/highlights.html
Horticulture www.urbanext.uiuc.edu/hort/index.html
Star gazing www.astro.uiuc.edu/~kaler/sow/sow.htm

NUTRITION
Healthful eating www.urbanext.uiuc.edu/nutrition
Nutritional analysis nat.crgq.com/

PETS
Care www.cvm.uiuc.edu/petcolumn
Dealing with loss www.cvm.uiuc.edu/CARE/