President vote expert gives Democrats ‘distinct electoral advantage’

By Andrea Lynn

News Bureau Staff Writer

History had some good news for the Democrats on the eve of their convention last week in Boston.

In terms of the relative size of their electoral base and its distribution across states, and despite current polling data, which is highly volatile at this point in the race, the Democrats began the 2004 campaign “with a distinct electoral advantage.”

So says Peter Nardulli, author of a new study that is based on 20 years of research on state-level presidential voting patterns in the United States between 1828 and 2000.

The study, titled “Handcapping the 2004 Presidential Election: A Normal Vote Approach,” will be published in the October issue of PS, or Political Science & Politics, a publication of the American Political Science Association.

Nardulli is a UI professor of political science and a voting expert who pioneered a “normal vote” approach to capturing changes in presidential voting patterns, using five-election “moving averages” of election returns.

According to Nardulli, the Democrats have not begun a presidential campaign in such a strong position since 1944.

“Practically speaking, all the Democrats need do is win the states in which they have a meaningful normal vote advantage to capture the presidency,” Nardulli said. “If the Democrats can do this, they need not win any Southern states in which the Republicans hold an electoral edge, were it to remain a constant. Moreover, even if Ralph Nader matches his state-level returns from 2000, this by itself will not be enough to overcome the Democrats’ electoral advantage in states that are essential to attaining an Electoral College majority.

The Democrats are in such a strong starting position because the 2004 campaign, because of the cumulative effects of gradual shifts in normal voting patterns across a wide swath of states outside the South. These trends began in the 1970s, Nardulli said, “and have eroded what once were sizeable Republican electoral advantages in a number of key states.”

“At the national level, the net electoral effect of these gradual shifts is comparable to most critical realignments in U.S. electoral history. Compareable periods of secular change benefited the Republicans in the first quarter of the 20th century and between 1932 and 1976.”

But does this mean that the Democrats have the 2004 election “won up?”

“Absolutely not,” says Nardulli. “The Democrats’ edge in the size and distribution of their electoral base does not mean they have a lock on this election. Electoral upset sets such as those that occurred in 1912, 1916 and 1976 demonstrate that even overwhelming normal vote advantages do not guarantee electoral victory. State normal vote advantages simply help to increase margins between the two parties as increases in unexplained voting patterns that are driven by such factors as increases in unemployment, inflation, or scandals such as the Teapot Dome Scandal, Watergate, Iran-Contra or the Monica Lewinsky affair.”

Other observations:

• To come by a bare majority of Electoral College votes with the smallest set of departures from established state voting patterns requires that the Republicans “hold their own” in those states where they have an electoral edge and win eight battleground states.

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• And if the Democrats win the presidency, as some polls are indicating, they need not win any Southern states to gain a majority of Electoral College votes. To come by a bare majority of Electoral College votes with the smallest set of departures from established state voting patterns requires that the Republicans “hold their own” in those states where they have an electoral edge and win eight battleground states.

• It’s a view of science that often warps the attitude toward science. Abd-El-Khalick advocates fostering a more creative and less ‘true’ than many believe, educator says

By Craig Chamberlain

News Bureau Staff Writer

Science is not just evidence, but intuition. It is not just procedures, but an approach. Its conclusions are not set in stone, but ever-changing and open to question as part of a dynamic social enterprise.

Yet the predominant view in schools and other science education reformers are teaching science as something that continues to be debated.)

To illustrate his point, he noted the ever-changing nature of science. “How many times have we heard that eggs are good for you in one decade, and the next decade, eggs are not good for you, and back again?” Abd-El-Khalick said. Many react by asking, “If science is the truth, then how come the scientists are changing on it?” They grow to distrust science itself, or think the scientists don’t know what they’re doing.

Teaching science

Societal views of science as an objective, authoritative means for unearthing absolute truth are detrimental to public policy discussions, distort the learning style of girls and foster distrust in the public when research findings conflict, said Fouad Abd-El-Khalick, a professor of education who has spent more than eight years studying students’ and teachers’ views toward science.

Abd-El-Khalick advocates fostering a ‘committed relativism’ attitude toward science that allows for ambiguity, uncertainty and change.

Science more creative and less ‘true’ than many believe, educator says

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But that reaction is a consequence of a
Due to Independence Day, the University of Illinois at Urbana-Champaign is closed this week. Staff at the News Bureau will be on hand July 5, 8, 9 and 12 to answer calls.


deads

John "Jack" Corbally, 79, died July 23 at his home. Lying in the rolling farmland near Barry speaks volumes about freedom and liberty, nearly everything adds a chapter to the American experience before the Civil War.

By Andrea Lynn

New Bureau Staff Writer

Indepedence Day took on new layers of meaning for a group of archaeologists who have been digging in western Illinois this summer.

Through remarkable entrepreneurial skills, McWorter not only raised the funds to buy his wife, himself and 16 members of his family out of slavery, but also reeked from Kentucky to Illinois, bought 42 acres of land, established New Philadelphia, and then turned it into a thriving prairie community by selling parcels of his land to other enterprising individuals.

It was no small feat that the integrated community succeeded. It was, after all, one of the toughest time periods in American history and in a landscape that was shaped by racial strife," Fennell said.

"People will say Illinois was a free state, but there were all sorts of ways that folks practiced slavery in Illinois, and there was a tremendous misconception of New Philadelphia being caught between the winds of Missouri and the neighboring slave states," he said.

Fennell said it is very likely that the townfolk, including the McWorters, were involved in the Underground Railroad. Hannibal, Mo., was just 20 miles to the east and there were a number of major abolitionists and grassroots escape routes flowing through that part of the time.

New Philadelphia thrived as an agrcultural market center for 50 years, but its lifeblood began draining out after the Hannibal & Naples Railroad bypassed it in the 1870s. By 1920, only a few families remained, the others having moved to prosperous towns on the railroad line. Eventually the town turned, like much of the state, into agrcultural land.

But during its good times, the town hummed harmoniously along with families of all kinds: African-Americans, "who had the town's povery history," reacit immigrants from Ireland; England and Canada, European-Americans; and possibly Native Americans.

Much of Free Frank's fascinating personal story was uncovered by former UI history professor Juliet Walker, herself the greatgrandchild of Free Frank. According to Fennell, the team has used "a remarkable array of research techniques" to uncover the history of the town and its people.

"Juliet Walker's fabulous study gave us leads on how to approach the town history," Fennell said.

In the second phase survey, geophysicist Michael Hurgrave from the U.S. Army Corps of Engineers in Champaign conducted a geophysics survey, using electrical current and electromagnetic monitors to determine the extent of the surface remains, ground, including potential storage tanks and other foundation remains.

Fennell attributed much of the field school's early success to the "cutting-edge approach to layering survey methods before we even chose where to do the in-ground excavations."

The actual digging began May 25. The team of professionals, graduate and undergraduate students spent the first five weeks of the program in the field, excavating for artifacts and the foundations of houses and other buildings.

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However, there are hundreds of people pulling for that to happen.

"Both the local community and the descendant community — folks who are descended from the original families but who now live elsewhere — have been fairly vocal thus far in saying they would like to see an interpretive visitor center built at or near the site. The story this field of study of New Philadelphia will be told, and where you can see some of the archaeological remains and the landscape of the town."

The surrounding communities of Pike County have, in fact, been "just incredibly supportive," Fennell said.

"This was the most well-appointed archeological dig I've ever been on. Through their own fund raising and logistical support, they helped provide us with a large tent and with a trailer that was air-conditioned and had running water. In addition, a local hunting lodge provided room and board for the students at significantly discounted rates."

"They kept trying to tell the students that this wasn't the way the average archaeological project worked," Fennell said.

The students are a story in themselves, Fennell said: "a remarkably integrated group in terms of their own ethnic and cultural heritage who are studying the history of a remarkably integrated town."

A "primary consideration was to try to attract students who are of an ethnic or cultural heritage that is underrepresented in these kinds of research projects," Fennell said. "Another consideration was to provide such hands-on research experiences to students enrolled at smaller liberal arts colleges who would not normally have access to these kinds of scientific research methods programs during the summer."

By Andrea Lynn

The University of Illinois at Urbana-Champaign campus is closed this week for the Fourth of July holiday. News Bureau Staff Writer Andrea Lynn covers the news of the day.

John "Jack" Corbally, 79, died July 23 at his Champaign home. "Free Frank," who came to be known as "Free Frank." McWorter not only raised the funds to buy his wife, himself and 16 members of his family out of slavery, but also reeked from Kentucky to Illinois, bought 42 acres of land, established New Philadelphia, and then turned it into a thriving prairie community by selling parcels of his land to other enterprising individuals.

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But during its good times, the town hummed harmoniously along with families of all kinds: African-Americans, "who had the town's poverty history," recent immigrants from Ireland; England and Canada, European-Americans; and possibly Native Americans.

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The actual digging began May 25. The team of professionals, graduate and undergraduate students spent the first five weeks of the program in the field, excavating for artifacts and the foundations of houses and other buildings. Now they are working for the Illinois State Museum's Research and Collection Center in Springfield cataloging and analyzing their finds, including buttons, fragments of bone combs and toothbrushes, comprising thousands of additional items for analysis.

For Fennell, the most exciting finds to date have been the "intact foundation remains," exciting in view of one of the team's priorities: to have the entire town on the National Register of Historic Places. For that to happen, certain things, for example, intact archaeological and archival features.

"So rather than just digging a site and collecting all the artifacts that may have been part of a trash dump, for example, we're specifically interested in finding the remains of the foundations, the footprints of the homes and buildings that were there."

"We've had tremendous success already this summer in that we have five or six such features already uncovered, and so we'll be applying this coming fall to get the entire town on the National Register of Historic Places."

It is rare for an entire town to be placed on the register, Fennell noted. However, there are hundreds of people pulling for that to happen.

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Asymmetric feature shows puzzle facing for superconductivity

By James E. Kloepel
News Bureau Staff Writer

The weird behavior of electrons tunneling across an atomically flat interface within a cuprate superconductor has defied explanation by theories of high-temperature superconductivity.

As will be reported in the journal Physical Review Letters, a team of scientists led by University of Illinois professor Bruce Eckstein has found a large particle-hole asymmetry in the density of states of excitations in high-temperature superconducting tunnel junctions embedded in a single crystal heterostructure. Since superconductors are supposed to possess particle-hole symmetry, it’s a different result that will require new theoretical work to be explained. The results are available online and in the Aug. 19 issue of Physical Review Letters article are Eckstein, Bruce David Kos at Los Alamos National Laboratory, and several others.

In tunneling spectroscopy of superconductors, the differential conductance is proportional to the density of states in the superconductor. "Below the superconducting transition, the tunneling conductance showed a large unexpected asymmetrical feature near zero bias," Eckstein said. "This is evidence that crystals of high-temperature superconductors, atomically truncated with intrinsic particle-hole symmetry."

At negative bias (corresponding to tunneling of electrons from states with particle-like character) the spectra exhibited the expected superconducting gap. However, at positive bias (corresponding to tunneling of electrons into states with hole-like character) the spectra showed a dramatic step-like increase. "This clearly demonstrates the breaking of symmetry between particle-like and hole-like excitations at this interface in the superconducting state," Eckstein said.

The junction heterostructures were very carefully grown by molecular beam epitaxy and optimized using in situ monitoring techniques, resulting in unprecedented crystalline perfection of the superconductor/insulator interface. It was the precise truncation of the crystal lattice at the calcium titanate interface that led to the new results.

"The interface density of states was strongly modified by superconductivity, as expected, but the resulting excitation spectrum was not particle-hole symmetric," Eckstein said. "This indicates that there is an underlying feature into which the tunneling occurred, superconductivity is very different from what is like away from the interface."

While the origin of this effect is still being debated, it definitely critically depends on the high degree of crystalline perfection obtained at the insulator-superconductor interface.

"The presence of this well-defined interface obviously perturbs the superconductivity," Eckstein said. "So these results can provide a new test for theories of high-temperature superconductivity."

The co-authors of the Physical Review Letters article are Eckstein, Bruce David Kos at the INFM-TASC National Laboratory in Italy, Revaz Rumanashvili at Argonne National Laboratory in Illinois, and Simon Kos at Los Alamos National Laboratory in New Mexico. The U.S. Department of Energy, National Science Foundation and Office of Naval Research funded the work.

Tell me about yourself off the job.

I use to box in New York from the time I was 10 years old until I was about 20. Now I coach, I run the boxing gym over at Lifelines in Champaign and teach people of all ages. I’ve had students ranging in age from 7 to more than 70 years old. I have about 60 members and about 20 assistant coaches. The rest of them come to learn, to develop confidence and because they love the workout.

I have one boxer who turned professional back in May. He’s an eight-time state Silver Glove champ and an eight-time Junior Olympics champion. He’s been ranked since he was 9 years old. Three of my sons will compete Aug. 7, in Iowa.

Boxing is a family affair for you, then.

I have 13 uncles and six of them used to box, I kind of got away from boxing when I left New York, and when my two oldest sons, Kenneth and Nelson Jr., told me they wanted to box, I wasn’t sure I wanted to let them. So I made a deal with them that they could box if they followed the program I gave them and got themselves into shape. It took me a few years of setting the right path into such good shape that I put them into a state tournament right off the bat. Kenneth took second and Nelson won the whole thing, I couldn’t believe it.

What do you focus on when you’re training someone?

Amateur boxing is about scoring points; whoever lands the most points is the winner. The game plan I always work on is setting the pace, controlling the rhythm of the match so they can carry for three or four rounds. I try to keep the fighter as mentally and physically prepared as I can because it’s a nerve-wracking sport. The hardest part of the game is not the fighting; the fight is easy. The hard part is getting yourself mentally and physically prepared. It takes dedication because amateurs train all year round; it is a seasonal sport.

Interview by Sharita Forrest, assistant editor

ELECTION CONTINUED FROM PAGE 1

document the relevance of these historical lessons. These current polls also show him trying – according to current theories – new in high-temperature superconducting tunneling across an atomically flat interface, within a cuprate superconductor has defied explanation by theories of high-temperature superconductivity.

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Misfiring proteins tied to inflammation and sick feeling of type 2 diabetics

By Jim Barlow
News Bureau Staff Writer

After a series of studies in the laboratory of Dr. Gregory Freund, a clearer picture is emerging: A disruption of signaling proteins in the immune system may be responsible for the inflammation that makes someone with type 2 diabetes feel sick and increases the risk of serious complications.

Freund, head of the pathology department in the UI College of Medicine at Urbana-Champaign and a professor of animal sciences in the College of Agricultural, Consumer and Environmental Sciences, is pursuing the theory that inflammation is tied to a disturbance of signal-carrying cytokines.

Type 2 diabetes – once considered an adult-onset disease – is an increasing problem alongside obesity, even among teenagers. Some 18 million Americans suffer from diabetes, with more than 90 percent being type 2, according to the Centers for Disease Control. The disease costs some $98 billion a year to treat and is the nation’s sixth leading cause of death – usually because of resulting cardiovascular and other complications.

The disease is initially characterized by high levels of insulin in the blood, a condition known as hyperinsulinemia, and insulin resistance, whereby cells refuse to let insulin inside. When that happens, the ability to regulate glucose levels is compromised. A mechanism thought to be a major player in the onset of insulin resistance, Freund said, is serine phosphorylation, triggered by hyperinsulinemia, of the insulin receptor substrates.

This phosphorylation, Freund said, “impacts other signaling cascades in cells, controlled by cytokines, especially ones like interleukin 4, an anti-inflammatory protein.”

A connection to the cytokine IL-4 was documented by Freund and colleagues in a study published July 2 in the Journal of Biological Chemistry. They found that IL-4 signaling was impaired when the researchers looked at macrophages (a type of white blood cells) removed from type 2 diabetic mice. The research – funded by National Institutes of Health, American Heart Association, American Diabetes Association and University of Illinois Agricultural Experiment Station – followed similar findings, presented two years ago in the same journal, based on experiments in cell lines.

In the new paper, we took the macrophages from type 2 diabetic animals and looked at the signaling abilities of the insulin receptor substrate 2 and, lo and behold, we indeed saw reduced signaling function,” Freund’s co-authors on the new paper were Matthew E. Hartman, Jason C. O’Connor and Jonathan P. Godbout, all of the university’s Division of Medicine; Kyle D. Maida, a medical student; and undergraduate biology honors student Valerie R. Mazzocco.

New work in the lab shows that cytokine-dependent fever and reduced social exploration is found in type 2 diabetes mice. The neuroimmune response leading to the sickness behavior, Freund said, was linked to hyperresponsiveness to lipopolysaccharide and potentially to cytokine resistance. Freund said that future research would be aimed at understanding breakdown in the insulin receptor substrate does in patients. “Such knowledge would be valuable to many diseases that involve inflammation and subsequent illness behavior,” he said.

The growing list of findings has led to a five-year $1.56 million grant, which was awarded to Freund in March by the NIH’s National Institute of Diabetes and Digestive and Kidney Diseases. Co-investigators are Robert Dantzer, a professor of animal sciences, and Jeffrey A. Woods, a professor of kinesiology.

There are three goals of the newly funded research:

• Determine the physiological relevance of the brain-immune interactions that occur in type 2 diabetes.

• Identify mechanisms that cause the pro-inflammatory state to inappropriately augment lipopolysaccharide-induced sickness behavior.

• Determine if a potential new drug combination could improve neuroimmune function and inflammation.

That potential therapy is based on yet another recent discovery in Freund’s lab. Vanadyl sulfate, which now is used to reduce blood glucose levels and lower the risk of future complications, might reduce diabetes-associated inflammation and stabilize brain-immune system interactions.

Olympic memorabilia on display through Aug. 31

‘Athens to Athens: Olympic Research Collections at the University of Illinois at Urbana-Champaign,” an exhibit at the UI Library, showcases artifacts, memorabilia and other materials pertaining to the Olympic Games. The exhibit includes reproductions of Olympic posters, commemorative pins, memorabilia and other materials pertaining to the Olympic Games. The exhibit includes reproductions of Olympic posters, commemorative pins, memorabilia and other materials pertaining to the Olympic Games.

Olympic Memorabilia on display through Aug. 31

News Bureau Staff Writer

After steady increases for much of the last year, the UI Flash Economic Index fell to 100.0 in July from a 100.3 level in June.

This rough patch in the state’s economic recovery mirrors the national economy, said J. Fred Gietz, the UI economist who released the Flash data Aug. 2.

The “3 percent growth of Gross Domestic Product (GDP) in the second quarter was significantly slower than the rate for the first quarter and also lower than the level predicted by most observers,” Gietz said. “A 3 percent real growth rate for the economy would be good news over the long run, but a higher rate was expected during this stage of the recovery.”

It is too early to say whether the state’s recovery has stalled, Gietz said. There has been positive news – for example, the Chicago purchasing managers’ index was up substantially in July – but the Flash Index and other indicators should be watched closely over the next few months.

State sales-tax receipts were up in real (inflation-adjusted) terms last month compared with July 2003, while individual income- and corporate-tax receipts were down slightly.

The Flash Index is a weighted average of Illinois growth rates in corporate earnings, consumer spending and personal income. Tax receipts from corporate income, personal income and retail sales are adjusted for inflation before growth rates are calculated. The growth rate for each component is then calculated for the 12-month period using data through July 31.

Economic index falls during July

By Mark Reutter
News Bureau Staff Writer

SCIENCE, CONTINUED FROM PAGE 3

culture of school science” in the United States and elsewhere that says science, properly practiced, will produce certainty.

Yet “the examples are countless whereby scientific claims tend to change,” he said.

Students and their teachers need to view science with more “tolerance for ambiguity,” Abd-El-Khalick said. They need to develop an attitude of “committed relativism.” That attitude, he said, accepts that “we do not know the truth, but at the same time, nothing goes away. We can say we know certain things with certain reliability, but we do not say that these things will not change in the future.”

The objective, authoritative view of the nature of science disfavors girls, Abd-El-Khalick has found that they also have little influence on their own. He argues that new incorporative activities that encourage students to reflect on what specific observations, experiments or historical episodes have to do with the nature of science will not significantly sway students’ views about the nature of science, he said, though many teachers and researchers continue to believe otherwise.

Courses on the history of science have been touted as a means for teaching students about the nature of science, he said, though many teachers and researchers continue to believe otherwise.

He argues that more recent research is looking at children’s conceptions of how we learn about the natural world, and how those conceptions change through the elementary, middle and high school years.

A principal aim of this research into students’ epistemological development – rarely done with younger students and adults – is to learn when students begin moving away from right-and-wrong, fact-and-white views of the world and knowledge. The point when that happens might be the point when students are more open to an authentic view about the nature of science.

The results are still preliminary, Abd-El-Khalick said, “but some really interesting things are coming out that show that some changes might be happening in high school that we probably did not think were happening at that level.”

Promoting a more-authentic view about the nature of science in our science-based culture is no small concern, Abd-El-Khalick said. “One of the big reasons why the nature of science has very significant implications for the way we teach science in schools, the way we talk about science in culture, the way we draw on science to make informed decisions about personal and societal science-related issues.”

One of the most interesting things we’ve found is that students’ and teachers’ views are not necessarily coherent. The attitude that they’re fluid, they’re changing,” he said.

His research and that of others strongly suggests that if science education does not significantly sway students’ views about the nature of science, he said, though many teachers and researchers continue to believe otherwise.

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Scientists build on case connecting inflammatory disease and depression

By Molly McElroy
Special to the News Bureau

Feeling sick can be “all in the head” for people with inflammatory disorders or for those receiving treatment for cancer. Robert Dantzer and Keith Kelley, UI professors in the department of animal sciences, have collaborated for 25 years to understand the link between a strong relationship between a molecular event and the development of psychopathology," Dantzer said.

The two scientists, who have collaborated for 25 years, hope to help patients avoid depression by exploring potential mechanisms that cause mood disorders. "The goal of our research is to understand the mechanisms that are responsible for causing depression in patients with inflammatory diseases," Dantzer said.

Depressive disorders occur in 12 to 30 percent of patients who suffer from various diseases with an inflammatory component, including coronary heart disease and autoimmune diseases such as rheumatoid arthritis and inflammatory bowel. These mood disorders usually are attributed to psychological problems encountered by patients having to deal with the suffering and disability brought about by their diseases.

However, Dantzer and Kelley explained, research on mice, whose immune systems are boosted by immunotherapy challenge this view and suggest that depression may originate in the immune system. Immunotherapy is used to treat patients who suffer either from kidney cancer or melanoma with metastasis, or from viral infections such as hepatitis C and AIDS.

"A few thousand cancer patients and several hundreds of thousands of hepatitis C patients are treated each year with immunotherapy," Dantzer said.

Immunotherapy involves the injection of cytokines, which are chemicals normally produced by immune cells that boost the immune system to fight infections pathogens and kill cancer cells. Unfortunately, immunotherapy also causes depression in 33 percent of patients, as reported by Dantzer in 2002.

Symptoms of depression begin within days to weeks of beginning treatment and vanish once it ends. “The occurrence of depression in cytokine-treated patients in our lab opens doors of veterinary, medical and graduate schools. It’s one thing to have a great grade-point average and solid test scores, but to also have your name on a paper published in a peer-reviewed journal is remarkable.”

Recent work by Dantzer and Kelley was sparked by the observation by Dr. Andrew Miller, a psychiatrist at Emory University, that Prozac lessens the level of depression in patients receiving immunotherapy.

In 2002, Dantzer, in a paper published in the journal Molecular Psychiatry, reported why cytokines cause depression. He found that cancer patients treated with cytokines had decreased blood levels of tryptophan. As tryptophan levels decreased, the severity of depression increased. That finding compelled Dantzer and Kelley to study how cytokines induce depression.

“We have always known that behavioral changes accompany sickness,” Kelley said. “For example, sickness will cause a person to sleep and eat less. Over the past 25 years, Robert and I have studied why sickness causes those behavioral changes. The work by Dantzer and Kelley is part of a growing trend of laboratory research that is melding the fields of immunology, psychology, neuroscience and biochemistry. They hope to expand the immunology field at Illinois by developing a program for integrative immunology and behavior."

"Right now at the University of Illinois, there are seven professors and research associates with nearly $12 million in grants in the area of integrative immunology and behavior," Kelley said. "We plan to use that financial base as a foundation to write a program project grant proposal that will fund graduate students and postdocs to study in- tegnative immunology and behavior."

Since they first met in 1979, Dantzer and Kelley have combined their training in veterinary medicine, psychology, immunology, physiology and biochemistry to produce 95 published papers. They often build upon their complementary strengths. “Robert will dream of such ideas as how hope affects healing, and I will think of how to test those ideas,” Kelley said.

In a landmark study published in 1992, Dantzer and Kelley were the first researchers to observe that mice develop a fever and display sickness-related behavior when cytokines are administered directly to the brain. "Previously, it was believed that sickness only occurs below the neck and the brain had nothing to do with it," Kelley said.

In another study in mice, Dantzer and Kelley found that when one of the neurological pathways from the body to the brain is severed, cytokines do not cause sickness behavior. "Signals from the immune system that indicate sickness do not reach the brain, so the brain does not know that it should show behavioral symptoms of sickness," Kelley said.

A growing number of scientists consider the immune system a "sixth sense." "We can touch, smell, taste, see or hear a virus," Kelley said, "but we have an organ that senses and responds to infectious pathogens, and that organ is our immune system."
Use of cameras to monitor nursing-home care is subject of controversy

By Mark Reutter
News Bureau Staff Writer

The proposed use of Web or video cameras to monitor the care of residents in nursing homes has kicked up a storm. Advocates of the cameras, dubbed "grandma cams," say their use in nursing homes could weed out abusive employees and document incidents of substandard care, while nursing-home owners term video surveillance an invasion of privacy that could maximize their legal responsibility in cases of resident-on-resident abuse.

"The number of type 2 diabetes is increasing to epidemic proportions, with the disease being found in younger and younger individuals every day," said Sandra R. Teixeira, who had pursued the research as the focus of her doctoral work at Illinois. "As a result, the rate also increases tremendously for making the data available online. cameras also could monitor many of the basics of resident care, such as drug administration and diaper changing. By linking the camera feed to the Internet, nursing homes could handle routine assignments more efficiently.

But because of understandable concerns over privacy, Cottle advocates placing the surveillance systems in the hands of independent companies, which would then monitor the equipment and be responsible for making the data available online.

"This service, like the cost of the cameras or of the tapes, is an added institutional cost that the nursing home will incur. But because of understandable concerns over privacy, cameras also could monitor many of the basics of resident care, such as drug administration and diaper changing. By linking the camera feed to the Internet, nursing homes could handle routine assignments more efficiently.

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In a new radio documentary airing on WILL-AM, University High school students examine how African Americans in Central Illinois combated racism in their schools and communities after the Brown v. Board of Education court decision and show how racism persists today.

In the program, “In the Wake of Brown: Stories of Integration and Struggle,” nine area residents, including Chamar Williams, a Uni High student, share their personal experiences of discrimination.

The program is the work of students at Uni High history teacher Jenny Vi. The students were involved in all facets of the production, including technical aspects of the recording, conducting research and developing interview questions. Kate Peisker was the program’s executive producer; Amelia Breault, Bethany Hutchens and Kinzie Cornwell were its producers.

WILL-AM’s Dave Dickey, who worked with the students on the project, said that much remains to be done despite progress made toward equality since the Brown decision. “A lot of discrimination has moved underground. It’s more subtle, but it’s just as hateful and devastating,” Dickey said.

The program will air at 6 p.m. Aug. 11 and will be repeated at 5 p.m. Aug. 14.

Since ‘Brown’ Uni High students contributed to a recent WILL-AM radio documentary, clockwise from left, narrator Ruth Welch, WILL’s Dave Dickey, producers Amelia Breault and Kinzie Cornwell.

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Free listserv available
The State Universities Annuitants Association has a free listserv about matters pertaining to SURS that is available to all UI employees, retirees and survivors.
To subscribe, send an e-mail to majordomo@elsi.uiuc.edu, with the subject line blank and include the following two lines in the body of the message:
subscribe SUAAttalk end

University YMCA
Annual garage sale will be Aug. 25-28
The University YMCA’s annual Dump-n-Run Garage Sale will be Aug. 25-28 at the UI Stock Pavilion. The sale will include clothing, office and home furnishings, stereo equipment and computers. Hours:
Aug. 25: 4 to 9 p.m. ($1 admission)
Aug. 26: 10 a.m. to 6 p.m. ($1 admission)
Aug. 27: 10 a.m. to 6 p.m.
Aug. 28: 9 a.m. to 1 p.m. ($2 bag sale)
For more information, contact Aimee or Christene at the University YMCA, 337-1500.

Will-AM documentary looks at struggle for equality
Ad removed for online version