A new study suggests that dogs may have first successfully migrated to the Americas only about 10,000 years ago, thousands of years after the first human migrants crossed a land bridge from Siberia to North America.

Researchers analyzed the mitochondrial DNA of 84 individual dogs from more than a dozen sites in North and South America, which is the largest analysis so far of ancient dogs in the Americas. The findings appear in the journal Science.

"This means mitochondrial DNA offers researchers an unbroken line of inheritance back to the past," Witt said.

"They gained access to new food sources, enjoyed the safety of human encampments and, eventually, traveled the world with their two-legged masters. Dogs also were pressed into service as beasts of burden, and some even served as food, particularly on special occasions."

"Dogs are one of the earliest organisms to have migrated with humans worldwide, and I think that says a lot about the relationship dogs have had with humans," Witt said. "They can be a powerful tool when you're looking at how human populations have moved around over time."

Human remains are not always available for study "because living populations who are very connected to their ancestors in some cases may be opposed to the destructive nature of genetic analysis," Witt said. Analysis of ancient dogs remains is often permitted when analysis of human remains is not.

Previous studies of ancient dogs in the Americas focused on the dogs' mitochondrial DNA, which is easier to obtain from ancient remains than nuclear DNA and, unlike nuclear DNA, is inherited only from the mother. This means mitochondrial DNA offers researchers "an unbroken line of inheritance back to the past," Witt said.

The new study also focused on mitochondrial DNA, but included a much larger sample of dogs than had been analyzed before. Molecular anthropologist Brian Kemp of Washington State University provided new DNA samples from ancient dogs remains found in Colorado and British Columbia, and the Illinois State Archaeological Survey provided 35 samples from a site in southern Illinois known as Janey B. Goode, near present-day St. Louis. The Janey B. Goode site is located near the ancient city Cahokia, the largest and first known metropolitan area in North America. Occupation of the Janey B. Goode site is thought to date to about 1,000 to 700 years ago. Dozens of dogs were ceremonially buried at Janey B. Goode, suggesting that people there had a special reverence for dogs. While most of the dogs were buried individually, some were placed back-to-back. There is evidence that some dogs were fed food for special occasions.

Recent high-tech anthropological studies at Cahokia have suggested that Cahokia's architecture was once a more active community, and that Cahokian people were a more peaceful society than their contemporaries in the Cahokia area. In Cahokia, dog remains, sometimes burned, are occasionally found with food debris, suggesting that dogs were present and sometimes were consumed. Dog burials during this time period are uncommon. See ANCIENT DOGS, PAGE 6
The Rare Book and Manuscript Library at the University of Illinois at Urbana-Champaign has received a $225,000 grant from the National Science Foundation to catalog rare Italian books in its collection.

The grant will support the work next year. The phase one grant is designed to complete development of a prototype and to design materials for the fall course. Taube said students will do some of their assignments with pencil and paper and others using his Harmonia program. A U. of I. statistics professor, Steven Culpepper, will analyze how effective the computer application is in teaching, compared with traditional methods.

The library cataloged about 7,000 volumes as a pilot project, in preparation for the grant application.

“Those get used all the time,” Hotchkiss said. “We call them ‘hot calls’ from around the U.S., so we know if we can make them accessible, they will be used.”

The Rare Book and Manuscript Library uses graduate students and recent graduates to gather the information from each item to make it accessible to someone searching the library’s copy is one of two known copies. It is on doing the work as quickly as possible, and with students and recent graduates trained in rare book cataloging, it is “extremely economical,” Hotchkiss said.

The cataloging work will start in January. The cataloged collection will be digitized.

RBML receives grant to catalog rare Italian books

A consultant will design the content and materials for the class. Taube said students will do some of their assignments with pencil and paper and others using his Harmonia program. A U. of I. statistics professor, Steven Culpepper, will analyze how effective the computer application is in teaching, compared with traditional methods.

Taube expects the program to be a stronger way for students to learn because it provides feedback more quickly, allowing subsequent lessons to be tailored according to how students are performing.

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By Jodi Heckel
Arts and Humanities Editor

A $225,000 grant from the National Science Foundation has been awarded to the Rare Book and Manuscript Library at the University of Illinois at Urbana-Champaign. The grant will enable the library to complete development of a prototype and test it in a classroom in fall 2015.

The $225,000 grant from the National Science Foundation will allow for a project to catalog the library’s Cavagna Collection, a collection of more than 20,000 rare Italian books from the 16th through the 19th centuries.

The library purchased the book collection in 1921 from the family of Count Antonio Cavagna Sangiuliani di Gualdana, a recognized authority on the local history of northern Italy. Valeriane Hotchkiss, the director of the Rare Book and Manuscript Library, called the books “one of the world’s premier collections for Italian studies.” After the books were acquired, though, “they were just put on the shelves in the general stacks.” Some rare materials were boxed up.

“We knew they were a rich resource but we hadn’t had the resources to catalog them until we got this grant,” Hotchkiss said. “It’s a hidden collection. It’s a collection we didn’t even know we had, we knew it was important, but people never had the time and the energy to do it.”

The library’s history is “very strong in our collection overall,” she said. “Now we can include Italian drama as well.”

Some of the items in the collection can parse it and figure out its theoretical context — how it’s made, what its chord progressions are, any anomalies in the music.” Taube’s goal is to have a solid prototype ready to use in a U. of I. classroom in the fall, where its effectiveness will be measured against traditional methods of instruction. The grant money will help to make improvements to the software and design materials for the fall course.

Taube said the application already can reconstruct complicated music, such as chorales. Now, he said, the software needs to be able to handle other kinds of musical exercises that are the nuts and bolts of teaching music theory.

“We need to be able to support many different kinds of exercises, such as figuring out the harmony of music, figuring out the chordal structure of it,” Taube said.

He said improvements also will be made to the interface and how information is sent to a server and then displayed to a teacher, including metrics on how the students are progressing and areas where they might be having problems.

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Taube received a grant through the Office of Technology Management at the U. of I. to help with formation of his startup company, Illi-Bi. Software. The NSF grant will support the work next year. He said the phase one grant is geared toward partnerships between small businesses and researchers at universities or public institutions.

“That was a natural fit for us, because what we’re trying to do is automate music instruction and bring it into the 21st century. The best place we could possibly do it is here at the university,” he said.

If all goes well, Taube will apply for a phase two NSF grant to commercialize the software and market it to the technology industry.

By Jodi Heckel
Arts and Humanities Editor

RBML receives grant to catalog rare Italian books

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Mellon grant to fund three new humanities research groups

The Illinois Program for Research in the Humanities (IPRH) has initiated a new fellowship program to fund three new humanities research groups at the University of Illinois at Urbana-Champaign. The grant will support research by U. of I. faculty members and graduate students in the fields of bio-humaneconomics, environmental humanities and legal humanities. The three research areas reflect strengths in the humanities and sciences, including architecture, art history and legal history.

The grant will be used for fellowships and internships for U. of I. faculty members and students, postdoctoral students and undergraduate interns. The initiative will include the creation of certificate programs for undergraduate students, who can then pursue advanced study in an area of humanities and the arts.

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Among the newcomers to the Urbana campus are faculty members whose appointments began this summer or fall. Inside Illinois continues its tradition of introducing some of the new faculty members on campus and will feature at least two new colleagues in each fall issue. We feature our final two new faces in this first issue of the spring semester.

Bertram Ludäscher

A professor in the Graduate School of Information Science and the National Center for Supercomputing Applications

Education: Ph.D. (computer science), University of Freiburg, Germany; M.S. (computer science), Technical University of Karlsruhe (now Karlsruhe Institute of Technology), Germany

Courses teaching: LIS 452, Foundations of Information Processing in LIS (Spring 2015); Foundations of Data Curation in the future.

Research interests: Scientific data management; data integration; knowledge representation; modeling, design and optimization of scientific workflows; data provenance; data curation.

“We are delighted to have attracted one of the world’s leaders in scientific data management to GSLIS,” said Allen Renear, dean of the Graduate College of Library and Information Science. “Digital technologies have created exciting new opportunities to analyze vast quantities of diverse data – but supporting the use of this information presents deep challenges. For many years now, Bertram has been leading the way in meeting these challenges.”

Why Illinois? “I am a computer scientist by training, but equally passionate about applications of information science and technology as I am about basic computer science,” Ludäscher said. “I’m excited to join GSLIS, the iSchool at Illinois, which has been a leader in information science research and education. They really understand the full data life cycle here, from analysis and information modeling to data curation and archival. I’m also looking forward to being part of NCSA with its unique resources and working with NCSA researchers and colleagues in computer science. The breadth and depth of research opportunities of the GSLIS-NCSA-computer science triangle is very unique to Illinois and exactly the kind of environment I love to work in.”

Jennifer L. Selin

Assistant professor of political science in the College of Liberal Arts and Sciences

Education: Ph.D. (American politics/political methodology), Vanderbilt University; J.D., Wake Forest University School of Law; B.A. (political science/American studies), Lebanon Valley College

Courses teaching: PS 101, Introduction to U.S. Government and Politics; PS 304, U.S. Presidency

Research interests: “(Professor Selin) studies how the Congress and the president control federal agencies,” said Robert Pahre, a professor of political science. “She finds that agencies with broad, complex missions are able to carve out more independence from Congress than agencies with narrow, well-defined mandates. She has compiled impressive datasets on bureaucracy that help us understand not only big, well-known bureaucracies like the Defense Department but also smaller, even obscure agencies. Her work gives us important insights into how Congress oversees policy. We tend to know a lot more about how Congress and the president pass legislation than what happens when the bureaucracy implements it.”

Why Illinois? “Quite simply, I chose the University of Illinois because it was the right fit for me,” Selin said. “When I visited Illinois for the first time, I felt there was an energy on campus that was unmatched at other universities. Here, the students seemed intelligent, happy and engaged, and the members of the faculty were doing exciting research. I felt confident that the university had the resources to help me continue to develop as a teacher and scholar.”
Employee’s record label earns two Grammy nominations

By Jodi Heckel
Arts and Humanities Editor

Saxophonist and band leader Isham Jones is best known for writing the melody for “It Had to Be You” and other hit songs. Although a well-known songwriter and band leader during the 1920s and 1930s, Jones’ early recordings are largely unknown and overlooked. Meagan Hennessey hopes that will change with the reissuance of music Jones recorded in 1920 in Chicago with his Rainbo Orchestra.

Hennessey – manager of Web services for the U. of I. College of Business – and her husband, Richard Martin, released the album of Jones’ music in August on their historic reissue label, Archeophone Records. The album, “Happy: The 1920 Rainbo Orchestra Sides,” has been nominated for a 2015 Grammy Award in two categories: Best Historical Album and Best Album Notes.

“It was appealing to us because he is a known figure and this is a largely unknown part of his career,” Hennessey said of Jones’ early recordings. “His arrangements were years ahead of other musicians”, and he did some really interesting things with the instrumentation.

“His recordings help fill the gap between ragtime and jazz.”

The Archeophone label specializes in music from the acoustic era (roughly the 1890s through 1925), recorded before microphones and other electronic devices came into use. The technology was crude: Singers and bands were recorded live through a recording horn, and there was no ability to edit or correct a take.

Hennessey and Martin formed Archeophone Records in 1998; they have produced 65 CDs and have been nominated for 11 Grammy Awards. Five of the nominations have been for Best Historical Album, and six have been for Best Album Notes. The label won a 2006 Grammy Award for Best Historical Album, and six have been for Best Album Notes. The label have extensive album notes and photos, as well as discographical information for each selection. “Lots of original research goes into each release,” Hennessey said.

The album notes for the Isham Jones set were written by David Sager, a trombonist and musical scholar. “David has a gift for explaining music and opening it up. His notes for ‘Happy’ give the listener a clear sense of not only where dance music was at the time Isham started, but also why his arrangements were so special,” Hennessey said.

In his album notes, Sager called Jones’ 1920 recordings from the Rainbo Gardens in Chicago “transitional efforts.”

“Isham Jones, on his earliest recordings, is such a musician who had one foot firmly rooted in the polite social dancing of the 1910s and one foot in the emerging modern dance band of the 1920s,” Sager wrote. “The tension between the old and new is palpable. We can feel the pull of both worlds, yet Jones never goes fully toward either. And amongst these forgotten performances, we feel part of a definite place and time. That place is Isham Jones’ Chicago. The time is 1920. And the feeling is happy.”

Hennessey said she and Martin have received great feedback on both the quality of the restorations and the recordings listeners are discovering for the first time. She is excited to be nominated again and pleased to see that all the nominees for Best Historical Album this year are independent labels.

“This is an area of music that’s largely unexplored, and we’re trying to change that,” Hennessey said of acoustical recordings. “We want to tell the story of the music and the personalities of the early recording industry.”

The Grammy Awards will be handed out Feb. 8. ◆

Makin’ music “Happy: The 1920 Rainbo Orchestra Sides” has been nominated for a Grammy Award in two categories: Best Historical Album and Best Album Notes.

ON THE WEB

grammy.com
www.archeophone.com

GRAMMY AWARDS

The 57th Annual GRAMMY Awards will be held on Sunday, January 26, 2015 at the Staples Center in Los Angeles, CA. The GRAMMY Awards will be broadcast live from the Staples Center at 8:00 PM, ET/PT on the CBS Television Network.

THE TENSION BETWEEN THE OLD AND NEW IS PALPABLE. WE CAN FEEL THE PULL OF BOTH WORLDS, YET JONES NEVER GOES FULLY TOWARD EITHER. AND AMONGST THESE FORGOTTEN PERFORMANCES, WE FEEL PART OF A DEFINITE PLACE AND TIME. THAT PLACE IS ISHAM JONES’ CHICAGO. THE TIME IS 1920. AND THE FEELING IS HAPPY.”

HENNESSEY SAID SHE AND MARTIN HAVE RECEIVED GREAT FEEDBACK ON BOTH THE QUALITY OF THE RESTORATIONS AND THE RECORDINGS LISTENERS ARE DISCOVERING FOR THE FIRST TIME. SHE IS EXCITED TO BE NOMINATED AGAIN AND PLEASED TO SEE THAT ALL THE NOMINEES FOR BEST HISTORICAL ALBUM THIS YEAR ARE INDEPENDENT LABELS.

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The Illinois State Archaeological Survey, a division of the Prairie Research Institute at the University of Illinois, supported this research.

As previous studies had done, the Illinois team analyzed genetic signals of diversity and relatedness in the vast majority of drugs from ancient dogs. They found that the region of the mitochondrial genome (the hypervariable region) of the ancient dog population in the Americas had unusually low genetic diversity in some dog populations, suggesting that humans in those regions may have engaged in dog breeding.

In some samples, the team found significant genetic similarities with American wolves, indicating that some of the dogs interbred with or were domesticated from American wolves.

But the most surprising finding had to do with the dogs’ arrival in the Americas. Witt said: “Dog genetic diversity in the Americas may date back to only about 10,000 years ago,” she said. “This also is about the same time as the oldest dog burial found in the Americas.”

The current study, of only a small part of the mitochondrial genome, likely provides an incomplete picture of ancient dog diversity in the Americas, Malhi said. “This may not be a coincidence.”

“The region of the mitochondrial genome sequenced may mask the true genetic diversity of indigenous dogs in the Americas, resulting in the younger date for dogs when compared with humans,” he said.

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ANCIENT DOGS, CONTINUED FROM PAGE 1

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Drug delivery

From left, Illinois professor Kyekyoon “Kevin” Kim, graduate student Elizabeth Joehon and research scientist Hyungsoo Choi developed tiny gelatin nanoparticles that can carry medication to the brain, which could lead to longer treatment windows for stroke patients.

By Liz Ahlberg

Physical Sciences Editor

Nanoparticles could deliver drugs to the brain

S

eroke victims could have more time to seek treatment that could reduce harmful effects on the brain, thanks to tiny blobs of gelatin that could deliver the medication to the brain noninvasively.

U. of I. researchers and colleagues in South Korea, led by U. of I. electrical and computer engineering senior research scientist Hyungsoo Choi and professor Kyekyoon “Kevin” Kim, published details about the gelatin nanoparticles in the journal Drug Delivery and Translational Research.

The researchers found that gelatin nanoparticles could be laced with medications for delivery to the brain, and that they could extend the treatment window for when a drug could be effective. Gelatin is biocompatible, biodegradable, and classified as “Generally Recognized as Safe” by the Food and Drug Administration.

Once administered, the gelatin nanoparticles target damaged brain tissue thanks to an abundance of gelatin-munching enzymes produced in injured regions.

The tiny gelatin particles have a huge benefit. They can be administered nasally, a noninvasive and direct route to the brain. This allows the drug to bypass the blood-brain barrier, a biological fence that prevents the vast majority of drugs from entering the brain through the bloodstream.

“Overcoming the difficulty of delivering therapeutic agents to specific regions of the brain presents a major challenge to treatment of most neurological disorders,” said Choi. “However, if drug substances can be transferred along the olfactory nerve cells, they can bypass the blood-brain barrier and enter the brain directly.”

To test gelatin nanoparticles as a drug delivery system, the researchers used the drug osteopontin (OPN), which in rats can help to reduce inflammation and prevent brain cell death if administered immediately after a stroke.

“It is crucial to treat ischemic strokes within three hours to improve the chances of recovery. However, a significant number of stroke victims don’t get to the hospital in time for the treatment,” Kim said.

By lacing gelatin nanoparticles with OPN, the researchers found that they could extend the treatment window in rats, so much so that treating a rat with nanoparticles six hours after a stroke showed the same efficacy rate as giving them OPN alone after one hour – 70 percent recovery of dead volume in the brain.

The researchers hope the gelatin nanoparticles, administered through the nasal cavity, can help deliver other drugs to more effectively treat a variety of brain injuries and neurological diseases.

“Gelatin nanoparticles are a delivery vehicle that could be used to deliver many therapeutics to the brain,” Cho said. “They will be most effective in delivering drugs that cannot cross the blood-brain barrier. In addition, they can be used for drugs of high toxicity or a short half-life.”

Both Choi and Kim are members of the Micro and Nano Technology Laboratory at the U. of I. Kim also is affiliated with the Neuroscience Program, the Institute for Genomic Biology, the Beckman Institute for Advanced Science and Technology, and the departments of bioengineering, of materials science and engineering, and of nuclear, plasma and radiological engineering at the U. of I.
Optimistic people have healthier hearts, study finds

By Sharita Forrest
Social Work Editor

People who have upbeat outlooks on life have significantly better cardiovascular health, suggests a new study that examined associations between optimism and heart health in more than 5,100 adults.

“Individuals with the highest levels of optimism have twice the odds of being in ideal cardiovascular health compared with their more pessimistic counterparts,” said lead author Rosalba Hernandez, a U. of I. professor of social work. “This association remains significant, even after adjusting for socio-demographic characteristics and poor mental health.”

Participants’ cardiovascular health was assessed using seven metrics: blood pressure, body mass index, fasting plasma glucose and serum cholesterol levels, dietary intake, physical activity and tobacco use – the same metrics used by the American Heart Association to define heart health and being targeted by the AHA in its Life’s Simple 7 public awareness campaign.

In accordance with AHA’s heart-health criteria, the researchers allocated 0, 1 or 2 points – representing poor, intermediate and ideal scores, respectively – to participants on each of the seven health metrics, which were then summed to arrive at a total cardiovascular health score. Participants’ total health scores ranged from 0 to 14, with a higher total score indicative of better health.

The participants, who ranged in age from 45-84, also completed surveys that assessed their mental health, levels of optimism, and socio-demographic characteristics such as age, race and ethnicity, income and education status were factored in. People who were the most optimistic were twice as likely to have ideal cardiovascular health and 55 percent more likely to have a total health score in the intermediate range, the researchers found.

Optimists had significantly better blood sugar and total cholesterol levels than their counterparts. They also were more physically active, had healthier body mass indexes and were less likely to smoke, according to a paper on the research that appears in the February/March 2015 issue of Health Behavior and Policy Review.

The findings may be of clinical significance, given that a 2013 study indicated that a one-point increase in an individual’s total-health score on the LS7 was associated with an 8 percent reduction in their risk of stroke, Hernandez said.

“At the population level, even this moderate difference in cardiovascular health translates into a significant decrease in death rates,” Hernandez said. “This evidence, which is hypothesized to occur through a biobehavioral mechanism, suggests that prevention strategies that target modification of psychological well-being – e.g., optimism – may be a potential avenue for improving Americans’ cardiovascular health by 20 percent before 2020.”

Believed to be the first study to examine the association of optimism and cardiovascular health in a large, ethnically and racially diverse population, the sample for the current study was 38 percent white, 28 percent African-American, 22 percent Hispanic, Latino and 12 percent Chinese.

Data for the study were derived from the Multi-Ethnic Study of Atherosclerosis, an ongoing examination of subclinical cardiovascular disease that includes 6,000 people from six U.S. regions, including Baltimore, Chicago, Forsyth County in North Carolina, and Los Angeles County.

Begun in July 2000, MESA followed participants, enrolling for 11 years, every 18 months to two years. Hernandez, who is a co-author on MESA, is leading a team in conducting prospective analyses on the associations found between optimism and heart health.

“We now have available data to examine optimism at baseline and cardiovascular health a decade later,” said Hernandez, who expects to have an abstract completed in 2014.

Co-authors of the current study were Kari N. Kershaw, Junde Suidee, Hongyan Ning and Donald M. Lloyd-Jones, all of Northwestern University; Julia K. Boehm of Chapman University; Laura D. Kubzansky of Harvard University; and Ana Diez-Franco of Harvard University.

The National Heart, Lung and Blood Institute supported the National Center for Research Resources funded the research.

Deaths

William Burwell, 86, died Jan. 7 at Champaign Urbana Nursing and Rehab Center, Champaign. Burwell was a faculty member of the University of Illinois for 11 years, then worked as a locksmith for 20 years, retiring in 1990. Memorials: Carle Hospice Foundation, 206A W. Anthony Drive, Champaign, IL 61822, or cardiologists @alpha-care.com. Rita A. Dufrane, 93, died Dec. 23 at C-U Regional Rehab, Savoy. She worked at the University of Illinois at Urbana-Champaign for 27 years as an agricultural gardener, retiring in 1983. Memorials: St. Patrick’s Catholic Church building fund, 708 W. Main St., Urbana, IL 61801.

Lloyd D. Shaw, 80, died Dec. 25 at Heartland Healthcare Center, Paxton. He worked at the University of Illinois for 11 years, retiring in 1990. Shaw was a building service worker for Facilities and Services. Memorials: Champaign County Humane Society, 1911 E. Main St., Urbana, IL 61802.

Kenneth Silver, 86, died Dec. 23 at his Mahomet home. He was a professor of aeronaunal and astronomical engineering at the University of Illinois for 26 years, retiring in 1993 as associate professor emeritus. Memorials: Mahomet Public Library, www.mahometpubliclibrary.org, 1702 E. Oak St., Mahomet, IL 61853.

Virginia Ann “Ginger” Tomlinson, 75, died Dec. 28. She worked at the University of Illinois for 24 years, retiring in 2004 as a building service worker for University Housing. Memorials: First Baptist Church, 1602 S. Prospect Ave., Champaign, IL 61874.

Judy L. Atwell R. Turquetto, 100, died Dec. 14 at her Champaign home. He retired from the University of Illinois at Urbana-Champaign, Champaign, IL 61820.
Research shows link between active lifestyle, brain function

By Mike Holenhal
Assistant Editor

Wojtek J. Chodzko-Zajko, who heads up the U. of I.’s department of kinesiology and community health in the College of Applied Health Sciences, measures his work productivity by miles not minutes.

That’s because Chodzko-Zajko and several members of the department have taken the standing workstation movement a step further, making the treadmill a central component of their office workspaces.

“I seldom exercise in a gym or fitness center, but I’m really physically active,” he said during an interview atop his moving treadmill, which is at the center of a vertically styled workspace designed for moving.

Instead of going to the gym, Chodzko-Zajko tries to live a life where potential motion is never wasted. He jogs to work, keeps a bike on campus and takes the stairs – not specifically to exercise, he says, but as an ecological choice that just happens to burn calories in the process.

After a while, he said, physical activity just becomes a part of the routine.

“I can’t work on a computer sitting down anymore,” he said. “It just feels so strange. If I’m writing a paper, I’d rather be standing.”

He said research being conducted by his department, the Beckman Institute for Advanced Science and Technology, and others supports the active-emphasis work, which finds that sitting on the move can lead to physical fitness and mental longevity.

Many U. of I. studies have shown that aerobic exercise actually improves the structure and function of the brain.

A study led by Beckman Institute director Art Kramer found that older adults who walked for 40 minutes three times a week for a year had increases in brain connectivity and performed better on cognitive tests than peers who didn’t engage in the walking program. A study from the laboratory of kinesiology and community health showed that physical activity protects the brain over time.

Why activity protects the brain is the subject of future studies.

STANDING, CONTINUED FROM PAGE 1

Rigorous research

Art Kramer, the director of the Beckman Institute for Advanced Science and Technology, added a treadmill and standing workstation to his office after research he conducted with members of the department of kinesiology and community health showed that physical activity protects the brain over time. Why activity protects the brain is the subject of future studies.

Just peachy

Both Stoltzfus, a program coordinator in the School of Music, cobbled together her own office workstation — using a retired pie safe she found in office surplus. She said the height of the side/desk is perfect for her work style and has led to reduced back discomfort. “The pie is, the shelves inside contain paper instead of pies,” she said.

Standing – which can reduce spinal pressure by half – is that one burns more calories.

The source of back problems isn’t always knowable, but Paluska said it is one of the most common human ailments – and is often magnified in countries with aging or overweight populations.

“Ever since we started walking vertically instead of on all fours, we’ve had back problems,” he said, which, along with a switch to a sedentary, computer-based lifestyle, is the best argument for developing easily adoptable long-term office ergonomic standards.

“It eventually leads to questions of workplace fairness and accessibility,” he said, and “people are standing up for themselves in that a little bit. They can get their own information and even a recommendation from a medical professional that a change needs to be made.”

Paluska said the real driver of workplace conditions has always been money.

He said employers are starting to recognize that responding to a common health issue like back pain can lead to savings in insurance and workers’ compensation costs.

“Knowing that makes workspaces start to listen to preventive strategies and develop ways to better accommodate their employees,” he said. “They’re starting to realize that it’s something that can be managed.”

He said he expects other common ailments such as diabetes and hypertension to be addressed at the workplace level in the near future.

“That’s the same conglomeration of issues,” he said.

And fewer people are sitting at work than ever before. “There are lots of jobs that require people to stand, so I think most people could adjust,” she said.

“A lot of people think it’s great,” Baxter said of his workspace. “Most say they wished they could have the option, even though they may not have a physical condition that covers one.”

Tami said standing at work has led to many conversations and even a couple of departmental converts.

One of her selling points is that when she’s standing at her desk and working alone, it’s easy to slip off her shoes for a little added comfort.

“It just feels more comfortable and makes it easier to work,” she said.

Jan. 15, 2014
Rethinking workplace culture can improve workers’ health

By Mike Helenthal
Assistant Editor

Under the Americans with Disabilities Act, campus officials must ensure that workers who need reasonable medical accommodations to do their jobs get it. Doing so keeps the university in good graces with federal authorities, helps the campus meet its institutional responsibility and gives everyone a fair shot.

She said her office has extended reasonable accommodation. The cost of accommodations can be made for just $500, she said, “and many workspace accommodations can be made for anywhere from $200 to $400.”

In the interest of collaboration, she said anyone with workspace problems should contact their department’s human resources officer, who in turn can contact her office to begin the Reasonable Accommodation process outlined in the ADA’s amendment.

The right thing
Michal Hudson, the campus’ senior Title IX and ADA specialist in the Office of Diversity, Equity and Access, says accommodating employees who need it is not just a bottom line consideration, but an moral one. “[The University of Illinois] has always been at the forefront of these issues,” she said.

The University of Illinois has always been at the forefront of these issues, and it’s an area where we’d like to continue to lead. It’s important to have these conversations.”

She said there is much more to learn about exercise’s effect on the brain, but believes the evidence will continue to support the value of an active lifestyle. She said she hopes the research results will lead people to think differently about exercise and movement.

“I would like to see a time come when it’s not rude or strange to ask in a classroom, at a meeting or conference if it’s OK for you to stand,” she said.

Kramer said he hopes the research helps lead a revolution against the sedentary lifestyle and makes people realize that a lifetime of even moderate, regular activity can produce benefits later in life.

Chodzko-Zajko said changing the sedentary culture is difficult because it requires people to step out of their comfort zones to try something new.

“I get tired when I sit all day,” she said. “But after a day on my feet, I feel much more alert. I’ve noticed a big difference. I don’t feel like I drowned in front of my computer.”

In the interest of collaboration, she said anyone with workspace problems should contact their department’s human resources officer, who in turn can contact her office to begin the Reasonable Accommodation process outlined in the ADA’s amendment.

The cost of the accommodation is borne by the department. She said the cost usually is “a pit- tance,” considering that even a small workplace adjustment can renew and enhance an employee’s mobility and productivity.

Most of the increase in standing workstation requests is low-back pain, and many accommodation certification can be obtained with the support of a doctor’s definitive diagnosis.

Non-health related requests are handled by local human resources officials, disability-related requests can lead to a workplace assessment or ergonomic evaluation through the safety and compliance division of Facilities and Services. The assessment is designed to produce easily implemented, common-sense recommendations, which can lead to an official reasonable accommodation.

If an employee isn’t satisfied with the university’s response, he or she can file a complaint with the Equal Employment Opportunity Commission requesting further investigation.

“The requests for reasonable accommodations have increased in the last few years,” she said, which have led to more meaningful discussions about the process, our institutional responsibility and remediation.

“The solution depends on what individuals need and why they need it. My message is, there are solutions out there – don’t ever be afraid to ask for a change.” She said the issue belongs in the conversation over diversity.

“We employ persons now whom you wouldn’t have thought to hire 10 years ago,” she said, “and that’s a great thing. People think differently and the process allows everyone to consider things that may not have been considered otherwise. It benefits everyone, and gives everyone a fair shot.”

Ads removed for online version
KAM features new takes on modern design, art of Wegman

By Jodi Heckel
Arts and Humanities Editor

W
ith its emphasis on function and utility, use of modern materials and manufacturing methods, and embrace of abstraction, modernism design was on the cutting edge of mid-20th century style, influencing architecture, art, the design of furniture and household objects, typography and graphic design.

Modernism has ignited a new passion among designers and collectors, who value the movement’s objects as historical icons. It also has inspired artists who are using modernist design objects in their own work to comment on the movement’s cultural significance. That artwork forms the exhibition “MetaModern,” opening at Krannert Art Museum on Jan. 29. It is one of five temporary exhibitions at the museum. The opening night reception is 6 p.m. Jan. 29, with comments by “MetaModern” co-curators Ginger Gregg Duggan and Judith Hoos Fox.

“As early as 2003, we were seeing work that started to focus on this idea of reinterpreting or modifying modernism by artists that were too young to grow up with it,” Duggan said. “It’s been just long enough, approximately 90 years since Bauhaus came about, to have some historical significance. That artwork forms the exhibition “MetaModern,” opening at Krannert Art Museum on Jan. 29. It is one of five temporary exhibitions at the museum. The opening night reception is 6 p.m. Jan. 29, with comments by “MetaModern” co-curators Ginger Gregg Duggan and Judith Hoos Fox.

“MetaModern” documents Hemingway’s permanent collection. The exhibition includes “My Decoy” by Brian Jungen, in which he transformed a Verner Panton cone chair into a Native American drum; a video projection by Josiah McElheny based on the J. and L. Lobmeyr chandeliers from New York City’s Metropolitan Opera House; and Willy Guhl’s “Endless Column,” which reproduces Constantin Brancusi’s 1918 “-endless Column,” reconstructing it from lampshades.

Krannt Art Museum is the first of six locations around the country that will present the “MetaModern” exhibition.

Also opening Jan. 29 is an exhibition of work by artist William Wegman that will include a number of his photographs of Weimaraners, for which he is best-known.

The exhibition, titled “Artists Including Me: William Wegman,” will include photographs, drawings and paintings. It will feature some of his paintings from the last 10 years, in which he used postcards to create narratives about what might be happening beyond the frame. It also will include work that relates to other well-known artists or artwork, often in a humorous way.

“There are some great paintings that reference the expressionist Wassily Kandinsky and others that playfully relate to Edward Hopper,” said Kathryn Koca Polite, co-curator of the exhibition with museum director Kathleen Harleman.

“I’m not really making fun of great art, but I’m playing with it, I suppose,” Wegman said. “That’s something that I would have avoided in 1970 and the late 1960s – I didn’t want any art references. I thought that was cheap to make fun of or to appropriate other art, and I didn’t really care for that. I’m just sort of admiring it and using it now, and spending as much time thinking about it and being around it – it’s kind of natural to me.”

Wegman, who earned his master of fine arts degree from the U. of I. School of Art and Design, will be at Krannert Art Museum for an artist talk at 5:30 p.m. March 5.

Both the Wegman exhibition and another new exhibition, “Versions and Revisions,” include pieces that relate to recognizable artists or styles, in the same way the artists in the “MetaModern” exhibition “are riffing directly from these iconic modern designs,” Koca Polite said. She curated the “Versions and Revisions” exhibition, which opens with the others on Jan. 29. The exhibition features works from the 1960s through the early 2000s that are part of the museum’s permanent collection.

“Speculative Visons of Pragmatic Architecture” is curated by U. of I. architecture professor Jeffery Poss and features the work of four U. of I. faculty members in the School of Architecture’s Detail and Fabrication program. Their work focuses on the process of making and the evolution of ideas manifested in physical form.

A second portion of the “Speculative Visions” exhibition highlights the design and preservation work of architecture professor Erik Hemingway. “Erik Hemingway Modernism” documents Hemingway’s preservation work on mid-century homes in Illinois and California.

Continuing at the museum through May 17 is a significant exhibition of Japanese prints, curated by U. of I. art history professor Anne Burks-Chasson. “With the Grain: Japanese Woodblock Prints from the Postwar Years” examines the deep history of this diverse art form and the ways in which these prints helped shape perceptions of Japanese culture outside of Japan.

For more information about the exhibitions and related events at Krannert Art Museum, see the museum’s website at kam.illinois.edu.
Robert E. Brown Center for World Music
Free music residency available

The Robert E. Brown Center for World Music is offering a weeklong workshop and performance residency that will allow participants to explore conducted, improvised music under the direction of composer/percussionist Adam Rudolph, a George A. Miller Visiting Artist. Go: Organic Orchestra, a residency Jan. 26-31, begins with a CAS/MillerComm lecture titled “Go: Organic Orchestra – Process and Prototype” at Spurlock Museum at 4 p.m. Jan. 27 and culminates with a performance at Krannert Center for the Performing Arts at 7:30 p.m. Jan. 31.

Rudolph has developed a system of techniques and compositional strategies for conducted improvisation he now employs in Go: Organic Orchestra, usually with 18-50 members, that embraces wide-ranging combinations of musical disciplines from jazz, classical and music traditions of the world, to contemporary electronic forms including computer laptop performers and disc jockeys.

Students, faculty members and community musicians of all musical backgrounds are invited to participate. The performance residency is offered at no charge; participants are expected to attend a minimum of two of four evening workshops, as well as the sound check and performance Jan. 31. Credit will not be offered to participating students, nor payment made to performers.

The outcome of this unique opportunity will be presented as a free performance in a concert setting, open to the general public Jan. 31. Register by email at worldmusic@illinois.edu with “Go: Organic Orchestra” in the subject line. Include your full name, instrument(s) performing, and phone number. Registered participants will receive score materials to review and practice before the residency begins.

Visits can be arranged for more information on the lecture and cwm.illinois.edu for more details on participating in Go: Organic Orchestra. For general inquiries, contact Jason Finkelman at 217-265-0640.

Beckman Institute Director’s Seminar
Wang to present Jan. 29

Ranxiao Frances Wang, a faculty member at the Beckman Institute for Advanced Science and Technology and a professor of psychology, will present “Getting Lost during Navigation: The Unconscious Processes” at noon Jan. 29 in Room 1005 of the Beckman Institute. The lecture is part of the institute’s Director’s Seminar. Lunch will be provided.

The next Director’s Seminar, on Feb. 26, will feature materials science and engineering professor Nancy Sottos who will discuss “The Evolution of Vascular Materials.”

Wellness Center
Healthy Weigh program begins Jan. 29

Is weight management among your 2015 resolutions? If so, sign up for Healthy Weigh, the Wellness Center’s popular weight-management program for U. of I. employees, which returns Jan. 29.

The program helps employees lose and maintain a healthy weight. The program features:

- Reliable information about effective and safe weight loss
- Group support
- Lifestyle skills training to establish healthy habits
- Healthy cooking demonstrations
- Two individual coaching sessions with a registered dietitian

Cost for the 10-week program is $100. Classes meet from 5:15-6:15 p.m. Thursdays beginning Jan. 29 in the Activities and Recreation Center. All group sessions are facilitated by a health educator.

Contact the U. of I. Wellness Center at ui-wellness@illinois.edu or 217-244-2205 for information or to register. For more information, go to www.campusrec.illinois.edu/wellnesscenter/services/

Graduate College
2015-16 Focal Point proposals sought

The Graduate College invites proposals from faculty members and graduate students for 2015-16 Focal Point projects. The full request for proposals is available on the Graduate College website at www.grad.illinois.edu/local-point. Focal Point seeks to stimulate the formation of new intellectual communities and interdisciplinary research activities among faculty members and graduate students.

The 2015 Focal Point RFP solicits proposals on a broad range of topics. New proposals are especially encouraged for:

- Collaborative research communities addressing issues of domestic underrepresented minorities in graduate education, aligning with the campus’s diversity initiatives. Such projects also may propose collaborations with domestic institutions to strengthen diversity in graduate education.
- Project teams that collaborate with international institutions or nongovernmental organizations (NGOs) to establish new partnerships for graduate education in the pursuit of innovative topics with international/global impact.
- Phase II proposals that build upon successful projects and provide new directions and opportunities for graduate students are welcome.

Proposals should be uploaded to the Graduate College website by March 20.

Illinois Theatre
Play run extended; ‘Sullivan’ postponed

Illinois Theatre has extended the run of its fall production “Oh What a Lovely War.” After a successful November run, “Oh What a Lovely War” returns to the Studio Theatre at Kranert Center for the Performing Arts Feb. 18-22.

“We have so much terrific work happening in our classrooms and on our stages here at Illinois Theatre that we can sometimes be flexible about our programming,” said Jeffrey Eric Jenkins, producer of Illinois Theatre. “In this case, we can make a truly wonderful production available for a larger audience when we reopen ‘Oh What a Lovely War’ in February.”

This return engagement replaces “The Sullivan Project,” which is being postponed and will not be presented this season.

“The project I have in mind needs more development time before we can bring it to a Krannert Center stage,” said Daniel Sullivan, Swanlund Chair in Theatre. “We’ve decided to delay ‘The Sullivan Project’ until next year to allow for that time.”

Patrons holding tickets for “The Sullivan Project” will be contacted by the ticket office and will receive first option on tickets for “Oh What a Lovely War.” Tickets are now on sale.

The production is one of several campus events commemorating the centenary of the beginning of World War I.
Muslims, Latinos overrepresented in national TV crime news

Social Sciences Editor

By Craig Chamberlain

I t seems as if most terrorists are Muslims and almost all immigrant lawbreakers are Latinos, it may be because you’re watching national TV news – not because those things are true.

That’s one implication of a study of five years of network and cable crime news led by U. of I. communication professor Travis Dixon.

The study, recently published online by the Journal of Communication, sampled 146 episodes of prominent news programs focused on breaking news (rather than commentary) that aired on ABC, CBS, NBC, PBS, CNN, Fox News, MSNBC and Univision over the calendar years 2008-12.

Dixon found that among those described as domestic terrorists on those programs, 31 percent were identifiable as Muslims. Yet in FBI reports for the same period, only 6 percent of domestic terrorist suspects were Muslim, or about one in 17. (In fact, terrorism on American soil is far more likely to be committed by white supremacists, Dixon said.)

Likewise, among those described as immigrants accused of a crime on those news programs, almost all (97 percent) were identifiable as Latinos, according to the study – yet only about half (47 percent) of immigrants are Latino, according to a well-regarded 2005 report by the Pew Hispanic Center.

The results show that “the entire way we conceive of these policies is through a particular kind of ethnic lens,” Dixon said. “Our conceptualization of various issues is so tied to race and ethnicity considerations that we’ve actually been somewhat misinformed.”

Dixon conducted the research for the study while a professor at the University of California at Los Angeles, and the episodes studied were among those available in UCLA’s Communication Studies Digital News Archive. Trainee student coders watched the programs and collected the data.

The episodes included in the sample were from “ABC World News Tonight”; “CBS Evening News”; “NBC Nightly News”; “PBS NewsHour”; “Anderson Cooper/Anderson Cooper 360”; “CNN Newsroom Live” and “The Situation Room” on CNN; “Fox News Live” and “On the Record with Greta Van Susteren” on Fox News; “MSNBC Live”; and “Univision Ultimate Hora” and “Noticiero Univision” on Univision.

Additional research was done while Dixon was a visiting scholar at the Center on Community Philanthropy at the University of Arkansas Clinton School of Public Service. Dixon’s co-author on the study is Charlotte Williams, the director of the center, as well as an Arkansas professor of public health.

In contrast with the overrepresentation of Muslims and Latinos in network and cable crime stories, Dixon found that African-Americans were significantly underrepresented in those stories, as both perpetrators and victims of violent crime.

According to the study, blacks were 19 percent of the violent perpetrators in the news accounts, yet were 39 percent of those arrested during that period, based on U.S. Department of Justice Uniform Crime Reports. They were 22 percent of the violent perpetrators in the news accounts versus 48 percent in the national crime reports.

These results are contrary to previous research, by Dixon and others, that has shown blacks as overrepresented, especially as perpetrators, in television crime coverage. “This is something I don’t think anyone has ever found in any study before,” he said.

These results are in line, however, with studies showing that African-Americans are almost invisible in other ways on national television news – rarely seen as spokesmen, experts or in other roles, Dixon said. “This says that those findings in other areas apply to crime news as well, and that was kind of surprising to us.”

One possible explanation, Dixon said, is that the perceived internal threat from crime has declined as a national issue since the 1990s, partly as a result of both declining crime rates and a greater perceived external threat, post-9/11, from terrorism and immigration.

That explanation and the results also fit with a “guard dog” perspective of news coverage, Dixon said. According to this perspective, the media often behave like a sentry for society’s power structure. Those with the least power receive the most bias in coverage, and news stories get greater attention if they identify something as an intruder or threat, he said.