

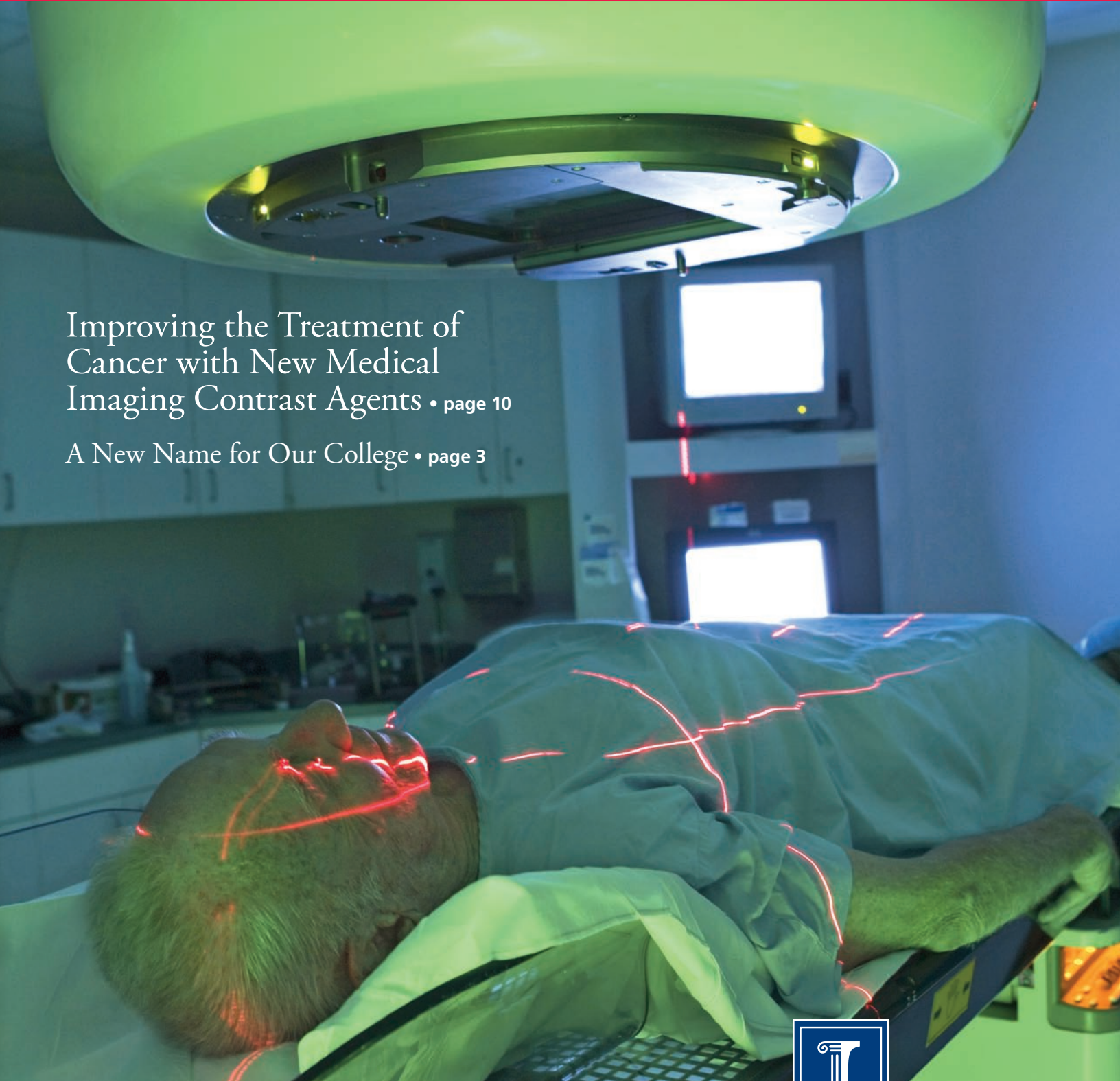
COLLEGE OF

AHS NEWS

The newsletter of the College of Applied Health Sciences at the University of Illinois at Urbana-Champaign

Improving the Treatment of
Cancer with New Medical
Imaging Contrast Agents • page 10

A New Name for Our College • page 3



A MESSAGE FROM THE DEAN

You probably noticed that this edition of our College newsletter is titled *AHS News*. This title reflects our new name, the College of Applied Health Sciences. Following extensive discussions, the faculty, students, and University leadership endorsed changing the name of the college from College of Applied Life Studies to the College of Applied Health Sciences. It was felt that this new name more clearly communicated the College's mission and the positive impact our programs have on health and well-being that has continued to evolve over the years.

In this issue of the newsletter you'll read about programs relating to this core mission of enhancing health and well-being. Faculty in Kinesiology and Community Health have developed an innovative "E-Diary" system for monitoring exercise and tracking physical activity, while all of our units have sponsored outreach programs and summer camps that provide unique services to our community. Our faculty in Recreation, Sport and Tourism are investigating the leisure habits of Latino "temporary migrant" workers, and research in Speech and Hearing Science may lead to a new breed of medical-imaging contrast agents that could improve head and neck cancer treatment and recovery. Our service programs continue to make great strides as well. The Motorcycle Rider Program is celebrating its 30th year of service in 2006, and the Division of Disability Resources and Educational Services recently hosted the first-ever Ultimate Basketball Challenge at the University of Illinois, in which athletes of DRES's wheelchair basketball teams and the University's varsity basketball formed squads that competed against each other in an Orange and Blue game.

These activities continue to strengthen the College's connection to our University, local, and state communities. It's an exciting time in the College of Applied Health Sciences as we continue to expand, both in numbers and in the range of scholarship, instruction, and service that we are providing. I'd like to invite you back to campus and see these changes for yourself. We look forward to welcoming you!



Tanya M. Gallagher

AHS

College of Applied Health Sciences
University of Illinois at Urbana-Champaign

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A NEW NAME FOR OUR COLLEGE

With the approval of the University of Illinois Board of Trustees, the College of Applied Life Studies has changed its name to the College of Applied Health Sciences. “This new name better reflects the 50-year evolution by all departments toward improving health and enhancing our quality of life through research, education, and public outreach programs,” said Dean Tanya Gallagher. The name change was discussed and endorsed by the College Administrative Council, Executive Council, Student Council, and Alumni Board this past winter. A faculty vote was held in February 2006, and there was overwhelming support to change the name of the College from Applied Life Studies to Applied Health Sciences. Approval for the name change was then requested and subsequently received from the campus, the University of Illinois Board of Trustees, and Illinois Board of Higher Education. The acronym for the College is now “AHS”—hence the change of our newsletter to *AHS News*.

The College can trace its roots back to 1895, when the Department of Physical Training for Men and the Department of Physical Training for Women were established.

1957	The School of Physical Education became the College of Physical Education. The college included the Departments of Physical Education for Men and Women as well as the Department of Health and Safety and the Department of Recreation.
1975	The College of Physical Education was renamed the College of Applied Life Studies.
2006	The College of Applied Life Studies was renamed the College of Applied Health Sciences.

When the College was first created in 1957, it was called the College of Physical Education. This name was changed to the College of Applied Life Studies in 1975. The College of Applied Health Sciences is our third college name. There are no changes in the programs of study as a result of the name change.

TWO AHS STUDENTS GARNER CAMPUS ACCOLADES

Anjali Forber-Pratt

was chosen to receive the 2006 Vicki Lynn Merkel Excellence in Leadership Award. This campus award honors a graduating senior who has demonstrated leadership qualities, integrity, and concern for others as well as recognizing someone who has significantly impacted the quality of campus life through programs, services, and activities. Anjali was chosen for her leadership in AHS Student Council and “Boxes and Walls,” an experiential “museum” built by students for students that takes an interactive, emotional approach to diversity education. With this award she received a scholarship and her name was added to the plaque in the Dean of Students Office. Anjali graduated on May 13 with a bachelor’s degree in speech and hearing science, and is now pursuing a master’s degree in the same department.



Community Health senior Courtney Weisman

was a 2006 recipient of the Mothers Association Humanitarian Service Award. The purpose of this award is to recognize and encourage students to be involved in community service. Courtney was chosen for her involvement with Ice Skating in the Community for Everyone (ICE), an outreach program which she created to teach children with disabilities to ice skate. Courtney earned a monetary award from the Mothers Association as well as a grant for the ICE program.



STRUGGLES OF ‘TEMPORARY MIGRANTS’ DOCUMENTED BY AHS RESEARCHERS

Research conducted by two faculty members in the Department of Recreation, Sport and Tourism is exploring the leisure behavior of an increasingly audible and visible population of Latino immigrants: Mexican “temporary migrants.”

To better understand how Mexican temporary migrants transnational status—that is, their attachments to dual countries and cultures—affects their leisure behavior, professors Monika Stodolska and Carla Santos have conducted in-depth interviews with 21 migrants living in a large metropolitan center (Chicago) and a smaller Illinois community (Champaign-Urbana).



Photo by L. Brian Stauffer

Monika Stodolska, left, and Carla Santos, professors of recreation, sport and tourism, have been studying the leisure habits of an increasingly visible population of Latino immigrants: Mexican “temporary migrants.”

“The goals of many of these migrants, at least initially, are not to settle down in the U.S., but instead to suspend their ‘normal’ lives for a limited period of time, to make as much money as possible, and to return to their home country,” Stodolska said. In reality, she said, many never do return to Mexico, yet they cling to that idea, while struggling to get by in this country for years, and sometimes decades.

Most never fully assimilate; instead, they remain in low-paying jobs, don’t learn to speak English or develop other new skills, live in substandard housing and limit their social and leisure activities for fear of attracting attention that could lead to their deportation.

“Due to the strong ties that they maintain with their country of origin, they (Mexican migrants) constitute an ideal population on which the effects of transnationalism on leisure behavior can be investigated,” Stodolska said. Another important reason for focusing on this particular population, she added, was because Mexican migrants represent the largest migratory work force temporarily residing in this country. Stodolska cited 2004 U.S. Census Bureau data, published online, projecting the number of first-generation Mexican immigrants in the United States to be 10.6 million; the number of Mexican Americans in Chicago alone, she said, has increased by 89.8 percent in the past 10 years.

Research results yielded poignant snapshots of hard-working people who remain focused on their goals, despite overwhelming odds—from a 44-year-old factory worker separated from her children for 10 years to a laborer who walks six miles each week to a phone booth in rural Illinois to call his family.

“Our research is designed to give a voice to these people and to show a human face of immigration—something that is often lost in the debates of economic impacts and legal issues,” Stodolska said.

The researchers’ findings suggest that the leisure activities and patterns of this population—or lack thereof—are shaped by four main factors: family status; unique work arrangements; economic, social and cultural networks; and unique legal status.

Because they are often separated from spouses, children and other family members, many of the migrants in the study reported feelings of loneliness and depression. For younger male migrants, the disconnection from family caused them to seek companionship from “substitutes.” These ad-hoc family associations ranged from acquaintances made while standing around in parking lots waiting to be hired for day-labor positions to less savory relationships formed by joining street gangs.

Many subjects in the study also reported limited or no time for leisure, as a result of physical exhaustion from working long hours.

“Regardless of the way in which Mexican migrants obtained their jobs, their work was extremely tiring and physically demanding,” Stodolska and Santos noted in the study. “A majority of those interviewed worked 70-80 hours a week, and ... after a full day of work were too exhausted to do anything besides watching TV.”

For Santos, the most significant finding of the research was that those interviewed were willing to persevere despite difficult circumstances.

“While conditions are bad, quality of life is poor and, for many, the end is never really in sight—or at least, it is a moving target—they are still willing to risk it all to be here,” she said. “No matter how bad things may be here, clearly in their minds it is worth it. Their ability to rationalize all that goes on is what keeps them sane; and that rationalization comes from knowing that there is something more, something better in the future. When that future will materialize, they don’t know.”

“It is unlikely that most Americans who come into contact with transnational migrants, who employ them, and who take sides in the ‘immigration debate’ realize or consider the sacrifices these people make to support their loved ones in their home country, the tough lives they live in the U.S. and the contributions they make to the economy,” she said.

“It is true that many of the migrants whom we interviewed came to this country illegally and were breaking the laws of this country, but in our research we are not trying to pass moral judgment on them, but to examine the quality of life of representatives of almost 11 million first-generation immigrants from Mexico who are residents of this country, regardless of the legality of their status.”

AHS FACULTY AND STAFF MEMBERS RECOGNIZED FOR CAMPUS EXCELLENCE

Five members of the Applied Health Sciences faculty and staff were recognized for their outstanding contributions to the University of Illinois and its students when they were named recipients of Campus Awards for Excellence this past spring.

Kinesiology and Community Health Professor **Susan Farner** received the Campus Award for Excellence in Undergraduate Teaching, the highest award the University bestows for undergraduate teaching. The award recognizes professors and graduate teaching assistants who display consistently excellent performance in the classroom, take innovative approaches to teaching, positively affect the lives of their students, and make other contributions to improve instruction, including influencing the curriculum.

Kinesiology and Community Health Professor **Kim Graber** earned a University Distinguished Teacher/Scholar Award. The program promotes excellence in teaching by honoring and supporting outstanding faculty



Susan Farner (r) is recognized by UIUC Provost Linda Katehi.

members who take an active role in enhancing teaching and learning on the U of I campus. She was honored not only for teaching students, but also for her role in mentoring other faculty members as well. She will retain the title of University Distinguished Teacher/Scholar throughout her Illinois career.

Speech and Hearing Science Academic advisor **Kathi Ritten** received the Campus Award for Excellence in Advising Undergraduate Students. She advises all undergraduate students in the department as well as potential applicants who may be interested in pursuing an undergraduate degree in speech and hearing science. She also teaches an orientation course for all first semester speech and hearing science majors and is the co-advisor for the local chapter of the National Student Speech Language Hearing Association (NSSLHA).

Two other Kinesiology and Community Health professors also were recognized. Professor **Edward McAuley** received Honorable Mention accolades for the Campus Award for Excellence in Guiding Undergraduate Research, and Professor **Reginald Alston** earned Honorable Mention recognition for the Excellence in Graduate and Professional Teaching Award.



Kim Graber



Kathi Ritten



Edward McAuley



Reginald Alston

ACCREDITATION GRANTED FOR RST PROGRAM

The Department of Recreation, Sport and Tourism recently underwent a comprehensive curriculum evaluation by the National Recreation and Park Association (NRPA) and the American Association for Physical Activity and Recreation (AAPAR) Counsel on Accreditation. The counsel unanimously supported the department, and granted accreditation effective April 13th, 2006. Accreditation is a status granted to educational institutions or programs that meet or exceed the stated

criteria for educational standards. "This accreditation sends a strong message regarding the quality of instruction provided by the Department of Recreation, Sport and Tourism and is a great assistance to students who wish to apply for Certified Park and Recreation Professional (CPRP) Certification through the NRPA," states Cary McDonald, department head. "The department has enhanced its well-deserved reputation as one of the premiere programs in the field."

AHS SUMMER CAMPS BENEFIT COMMUNITY AND STUDENTS

During the fall and spring semesters, campus is bustling with students and the academic opportunities are abundant. However, many AHS students remain in the Urbana-Champaign area to take advantage of learning opportunities available through several summer camps that are sponsored by the units in our college.



The Sports Fitness Program summer camp included kayak instruction in the Freer Hall swimming pool.

In its 55th year, the Department of Kinesiology and Community Health Sports Fitness Program has served an average of 100 children per year since 1951. It also provides practicum experience for AHS students, most of whom are Kinesiology majors hired to work in one of three areas: individual and dual sport skills, team sport skills, or aquatics.

Senior Montana Willamon is working with the Sports Fitness Program to help prepare her for a career as a physical education teacher. “This camp is related to kids and fitness, which gets me prepared and gives me more experience for my career as a PE teacher,” Montana said. “It’s a great opportunity for me to work with a variety of sports and with kids of different ages. It’s fun and I enjoy watching their progress throughout the summer.”

Carrie Lullo is a kinesiology grad student who is working with the Sports Fitness Program for the first time. “I have learned a lot about patience” she said. “When the kids do things, they are doing them for the first time. They get excited about making improvements and become good at the different sports in little ways.” She believes that working with the camp has allowed her to learn about a variety of sports as well as giving her experience in working with children.

Jessica Galli, a recent kinesiology graduate who will be working toward a master’s degree in Community Health

in the fall, and Doug Forbis, a kinesiology major, both benefited from their participation in the athletic camps sponsored by the Division of Disability Resources and Educational Services (DRES). This summer, they are both working as counselors with the DRES Track and Field camp.

“I came to camp four years ago to get instruction because I didn’t have a coach at home,” Doug said. “Now I go to school here and I am on the track team. A lot of the kids here at camp are new to track. I’m glad that they can receive instruction to start out their careers the right way.”

Speech and Hearing Science offers children opportunities to improve language, phonology, articulation, and fluency through a variety of activities. At each session the groups read books, play games and participate in activities. Each week the camps have different themes such as the ocean or the jungle to allow the campers to learn in other areas as well. First- and second-year graduate students are paired up to work with the different groups of children. They research different activity possibilities and games, and modify activities to meet their goals. Amanda Austin and Kristin Riermaier are two of the student facilitators.

“The camps allow me to work with kids at different levels with different issues at the same time and have fun doing it,” shared Amanda.

Summer camps in the Department of Recreation, Sport and Tourism serve individuals across the state as well. The Illinois Rural Recreation Development Project (IRRD) is in its 12th year of running Summer Daze camps for children ages 5 to 13 in small towns across the state. The camps allow children in rural areas to participate in



AHS students Jessica Galli and Doug Forbis worked as counselors at the DRES Track and Field Camp.



The Summer Daze camps sponsored by Illinois Rural Recreation Development Project provide activities for children from ages 5 to 13 in small towns across the state.

active recreation with their friends and learn new games and activities to fill their leisure time while they are at home. The project provides some of the initial funding and training necessary to start a youth camp with the goal of the local community making the camp an ongoing, self-sustaining event.

Dr. Laura Payne, a professor in Recreation, Sport and Tourism, is the project director. She emphasizes the importance of student involvement in the planning of events, evaluating community progress, and providing

new ideas based on their own past camp experiences. “Their involvement also gives them opportunities that will help them in their careers after college, said Payne. “By working at summer camps, Applied Health Sciences students are given incredible opportunities to learn and gain valuable experience while helping others.”



Speech and Hearing Science graduate students Amanda Austin and Kristin Riermaier facilitated sessions during the Speech-Language Summer Camp.

MOTORCYCLE RIDER PROGRAM TURNS 30

The University of Illinois Motorcycle Rider Program, which was founded in 1976 by Dr. Rudolf (Rudi) Mortimer, is celebrating its 30th year providing training in motorcycle safety. Since its inception, over 50,000 people have received training through the U of I Motorcycle Rider Program, and today there is typically a waiting list to get into the classes. The popularity of the program comes as no surprise to John Sudlow, director of the program. “We offer Illinois residents free instruction, which includes 20 hours of hands-on training, and we even supply them with a motorcycle and helmet to train with if they don’t yet have one. It’s the best training you’re going to get,” said Sudlow. Given the popularity of the course among motorcycle riders, the program will likely continue to grow as a valued part of the College of Applied Health Sciences.



NEW FUNDS ESTABLISHED TO SUPPORT AHS STUDENTS

Through the generous gifts of many caring individuals, several new awards were created to support the educational endeavors of AHS students.

Richard F. Schweig (Kines '81) created the Marianna Trekell Scholarship to honor his mentor. Professor Trekell (1926–2004) was a faculty member in the former Department of Physical Education. She was well-known for her expertise in oral history research and the history of sport, teaching, and mentoring countless students throughout her 30-year career. The first recipients of this Kinesiology and Community Health award were undergraduate students Shuhei Suzuki and Danae Alwardt.



Shuhei Suzuki with Dr. Kyle Ebersole (l) and Richard Schweig (r).

Family and friends of University of Illinois alumna Christine Ziebarth Howe (1951–1997) created the Christine Ziebarth Howe Graduate Student Award to honor her legacy and support outstanding doctoral students. She was among the first



Dr. Carla Santos (l) and Samantha Rozier

women elected to the Academy of Leisure Sciences. At the time of her death Dr. Howe was a professor in the Department of Recreation and Leisure Studies at SUNY, Brockport. Samantha Rozier, a doctoral student in the Department of Recreation, Sport and Tourism, was the first recipient of this award.



Frances Johnson (l) and Julie London.

Retired professor Frances L. Johnson created the Frances L. Johnson Student Award to provide recognition and financial support to Speech and Hearing Science students pursuing clinical careers. Professor Johnson served on the University of Illinois faculty for more than 30 years. She was instrumental in raising the status of speech-therapy programs in public schools. Julie London was the inaugural winner of this award.

JEAN DRISCOLL JOINS AHS

Jean Driscoll started this past February as a major gift officer for the College of Applied Health Sciences. Jean has two degrees from the University of Illinois, including a master's degree in rehabilitation from the College of Applied Health Sciences. Although Jean is best known for her remarkable accomplishments as a professional athlete (including 8 victories at the Boston Marathon), corporate spokesperson, author, and highly sought-after professional speaker, it is her commitment to her alma mater and her passion for advancing our work in health, aging, and disability that bring her to this position. We are extremely pleased to have Jean join our development efforts.



“ULTIMATE BASKETBALL CHALLENGE” DELIGHTS FANS, RAISES MONEY

Soon after the conclusion of the basketball season last April, the men’s and women’s varsity and wheelchair basketball teams came together for a charity event to raise money for the wheelchair sports program and Coaches vs. Cancer. Athletes from the four teams combined to form Orange and Blue squads. Each team consisted of players from all four groups as they competed in the University of Illinois inaugural “Ultimate Basketball Challenge.”

Everyone played in a wheelchair. While many of the champion athletes in action for the event were accustomed to playing in chairs, the other half of the players struggled to adjust their shots, chase down passes and maneuver themselves into position to battle for rebounds. Some of the varsity athletes even fell out of their chairs and rolled on the floor in their attempts to keep up with the competition.

“Playing in a wheelchair is harder than it looks. It takes a lot of upper body strength, but its fun. I give the wheelchair players a lot of credit for being so good at this game. They are amazing,” said varsity women’s team member Stephanie Chelleen, a community health major.

The teams played two 20-minute halves, with a three-point shooting competition serving as the half-time entertainment.

“The wheelchair teams had the advantage because they are quicker and craftier,” said varsity women’s head coach Theresa Grentz. “Camaraderie is what sports is all about and this was a win-win situation for all involved.”

“For a first-time event, it was great,” said men’s varsity head coach Bruce Weber. “Everyone enjoyed it. It was great exposure for the wheelchair teams, and they deserve



it. We were able to raise some funds for some great causes. Hopefully it will become an annual event.”

The event was organized by recreation, sport and tourism senior Robbie Taylor. It was modeled after a similar annual event at the University of Arizona. After gathering information from the program director at Arizona, Taylor set out to design and implement the new program. After working with professors to create an action plan and sponsorship package, he approached representatives from all four teams to organize the event.

“The game was fantastic. It was a big success. I enjoyed playing with the able-bodied team. They embraced it and wanted to be a part of it. They got to see how hard it is to play in a chair,” said wheelchair team member Kathleen O’Kelly-Kennedy, a recreation, sport and tourism major.

After putting more than a year’s worth of effort into the planning and execution of the inaugural event, plans are already under way for next year’s Ultimate Basketball Challenge.

“It was a great opportunity to give people on campus a chance to see all of the outstanding athletes and an opportunity for the University and its programs to give back to the community,” said wheelchair basketball head coach Mike Frogley. “I’m glad we had the opportunity to come together. I look forward to building on the event.”



Photos by Josh Birnbaum

IMPROVING THE TREATMENT OF CANCER WITH NEW MEDICAL IMAGING CONTRAST AGENTS

COVER STORY



Research by Dr. Kenneth L. Watkin in the College of Applied Health Sciences at the University of Illinois at Urbana-Champaign has created the first water-stable nanoparticle made from gadolinium oxide that may be useful for the diagnosis and treatment of cancer.

“I began to explore medical imaging contrast agents because my area of interest is imaging and head and neck cancer,” Watkin said. “And as I would do imaging studies, I would see the true devastation of chemotherapy and radiation therapy to individuals from a psychosocial and a physical point of view. So I challenged my doctoral students with the following question, ‘How could we create a head and neck cancer imaging contrast agent that would work as both a diagnostic agents and treatment agent?’”

Gadolinium ions are a popular component of medical imaging contrast agents used to enhance magnetic resonance image (MRI) quality. Watkin’s findings, recently highlighted by the National Cancer Institute’s online news source NCI Alliance for Nanotechnology in Cancer, are the result of work with former MD/PhD student Michael McDonald, who is now completing a postdoctoral fellowship and internship at Stanford University. Their work as recently published in the *Journal of Academic Radiology* in a research article entitled, “Investigations into the Physiochemical Properties of Dextran Small Particulate Gadolinium Oxide Nanoparticles.” Watkin and McDonald created the first water-stable nanoparticle made from gadolinium itself. The key to their success was coating nanoparticles made from gadolinium oxide with a thin coat of dextran, a naturally-occurring carbohydrate. The dextran coating prevents gadolinium from reacting chemically with water, a process that normally occurs readily. The coating also provides a surface to which tumor-targeting and therapeutic agents can be readily attached.

Use of this new contrast agent may, in turn, significantly improve the diagnosis and treatment of cancer. “The goal of this work for me was to be able to create advanced methods for the diagnosis and treatment of disease, specifically cancer, that reduce the toxic effects that we see with our current treatments,” Watkin said. “And to do that, I had to develop really, really, really small particles that would not only identify the location of the cancer but, in addition, could be employed as a cancer treatment agent.

In their work with gadolinium oxide nanoparticles, Watkin and McDonald started by breaking nanoparticles down into even smaller particles. Next, they successfully



Photo by L. Brian Stauffer

Ongoing research by Kenneth Watkin, professor in the Department of Speech and Hearing Science, may lead to a new breed of medical imaging contrast agents that could improve head and neck cancer treatment and recovery.

coated the particles with dextran, a naturally occurring carbohydrate.

The chemical coating—which Watkin compares to the thin, outer shell of an M&M candy—functions as a spacer, preventing the nanoparticle from undergoing a chemical reaction when it comes in contact with water. It also keeps the nanoparticles from clumping and behaving erratically.

In addition, gadolinium oxide is also an effective emitter of radiation which also makes it well-suited for use with a special type of cancer therapy called neutron capture therapy.

“What this means,” Watkin said, “is that these little particles capture the neutrons and emit alpha and gamma rays, and that energy is what can be used to kill cancer cells.”

“In looking at this, we both said, these little gadolinium particles capture neutrons at four times a greater rate than boron, the currently used neutron capture agent. This means it (gadolinium oxide) is potentially a multi-modal agent” ... in other words, “a contrast agent that would work with a number of different medical imaging techniques.”

Among the most promising applications for using gadolinium oxide nanoparticles as a neutron capture therapy agent is in the treatment of brain tumors. “Treating brain tumors—typically called glioblastomas—is very difficult,” Watkin said. “So these little gadolinium oxide particles may be really useful.”

Watkin acknowledges that it could be years before the researchers’ work results in diagnostic or treatment methods used in clinical practices.

“We have a lot of potential research directions ahead of us,” he said. “I think one of the directions this is going to take is exploring its use at the molecular level with various types of other high-resolution imaging systems. And if it’s of interest for use within humans in the end, all of the pharmacological attributes of this will have to be explored.

“That is, its distribution in the body ... where do the nanoparticles go? What are its effects? How long does it last? All of those kinds of things are part of the preclinical work, before people can even consider using it.”

WATKIN AWARDED NCSA FELLOWSHIP

Ken Watkin, professor of Speech and Hearing Science, was one of 13 UI faculty members named as faculty fellows for the 2006-2007 academic year by the National Center for Supercomputing Applications.

The NCSA/UIUC Faculty Fellows program extends opportunities in advanced computing and information technology to UI faculty members. In addition to financial support, faculty fellows have access to NCSA’s high-performance computers, visualization and data-analysis tools, and other advanced information technology, as well as opportunities to collaborate with NCSA staff members. Awards are administered through NCSA’s Campus Relations office, directed by Radha Nandkumar. The program is funded by NCSA and the Office of the Vice Chancellor for Research.

“The fellows program offers opportunities for faculty and NCSA staff members to collaborate on projects of common interest and to be exposed to the breadth of research on campus. Nandkumar said “This is a truly beneficial win-win situation.”

LIFETIME FITNESS PROGRAM CONTINUES TO THRIVE

For nearly half a century, adults in the Champaign-Urbana area have had a unique opportunity to participate in a structured physical activity program coordinated by the Department of Kinesiology and Community Health. The Adult Fitness Program, which has the distinction of being the first university-based adult fitness program in the world, was founded in the early 1960s by Dr. T.K. Cureton to examine the effects of exercise and physical activity on health and physical functioning. Today, although slightly altered through the years, the concept of the initial program continues to thrive, serving approximately 100 adults age 55 and older who meet at the Campus Recreation Center East facility every Monday, Wednesday, and Friday.

“We welcome individuals of all fitness levels,” says Professor Ellen Evans, the director of the program. “The exercises are designed to develop overall improvement in health, fitness, and the performance of daily living activities.”

The program begins bright and early at 6:30 a.m., offering both group and individualized fitness activities. Available group exercise opportunities include supervised walking and jogging, stretching and strengthening, balance and



Photo by Elise McAuley

gait and water exercises in the swimming pool. Cardiovascular equipment (e.g. treadmills) and resistance training equipment (e.g. machines or free weights) are also available. “You may participate in any or all activities each day,” says Evans. “The choice is up to the individual, based on their comfort level, health status and fitness goals.”

continued on page 14

AN EXERCISE DIARY YOU TALK TO

An interdisciplinary team of researchers led by kinesiology professor Weimo Zhu has developed an electronic diary that recognizes human speech and translates it into exercise data. Preliminary research findings were presented at the recent American College of Sports Medicine annual meeting.

The e-diary makes tracking physical activity easy. Using a digital recorder, the e-diary prompts the user to record an accounting of recent activity at predetermined intervals, usually every 60 minutes. The e-diary uses speech recognition technology and text classifying software to determine the activity described by the user. So, when the user records the words “Walked the dog for 15 minutes,” the software recognizes the words, assigns them into a corresponding activity category (e.g. “walking”), and computes caloric value for the activity. The software can present a graph indicating calories burned over the course of days, weeks, and even years by type of physical activity. Initially designed for use by rehabilitation patients, the e-diary can be used by anyone who diets or exercises as a means of tracking activity.

According to Zhu, there are multiple problems with the current, written approach. “First, you have to remember all of the activity and write it down. The second major barrier is, after you get the data, you have to score it. This is very labor-intensive and expensive. There is often scorer error due to the scorer’s subjectivity.”

ZHU JOINS PRESIDENT’S FITNESS COUNCIL BOARD

Weimo Zhu, associate professor in the Department of Kinesiology and Community Health, was appointed to the President’s Council on Physical Fitness and Sports’ (PCPFS) Science Board in February for his contributions to the research and science of physical activity. His research focuses on measurement and evaluation in kinesiology. Board members make recommendations to council staff and members regarding program development and evaluation. Dr. Zhu also is a visiting professor at the Guangzhou and Shanghai Institute of Physical Education in China.

With new grant support, Zhu and colleague Mark Hasegawa-Johnson, an electrical and computer engineering professor, are expanding the e-diary to work via cell phone to assist in assessing the physical activities of persons with disabilities. Instead of carrying a recorder that prompts the user to dictate activity information, the user would receive a call to his or her cell phone seeking an activity update. “At the end of the week the system could compute the amount of energy they’ve been using and plot it. Then, the system could give suggestions for changing activity patterns,” notes Hasegawa-Johnson.



Professor Weimo Zhu and his doctoral student Marco Boscolo test the E-diary system.

Another planned feature of the e-diary system would help the user attain a set exercise target. “For example, after a baseline assessment, you may determine to spend a certain number of calories in a day. During the middle of the day, the system will say, ‘here is how many calories you’ve spent so far and you have to spend so many more to meet your goal.’ The system provides feedback like a personal trainer,” explains Zhu.

The researchers also plan to expand the e-diary to calculate nutrition. “We will use speech recognition to track not only physical activity but also eating behaviors,” says Hasegawa-Johnson. “So the user would say, ‘I had lunch and I had a ham sandwich and a diet soda.’” The system would then calculate calories and other nutrient intakes, as it currently does activity input.

According to Zhu, the possible applications for the e-diary could have a major impact on physical activity and health as we know it. “The e-diary may one day be able to give mental and bone health benefit scores of physical activities, too, and will eventually be a comprehensive tool for promoting good health. It would be perfect to give people instant feedback, but also to track their long-term progress. The system would essentially serve as a personal e-trainer, helping individuals but also giving doctors important data, and allowing researchers access to a large pool of data from a distance, too.”

Research has been underway since early 2003. Initial funding was provided by the Robert Wood Johnson Foundation. Recent funding was provided by the Neer Research Fund at Illinois. Dan Roth, associate professor of Computer Science; Electrical and Computer Engineering graduate students Mital Gandhi and Art Kantor; and Kinesiology graduate students Yong Gao and Youngsik Park also assisted with the project.

AHS WELCOMES NEW FACULTY AND STAFF

KINESIOLOGY AND COMMUNITY HEALTH

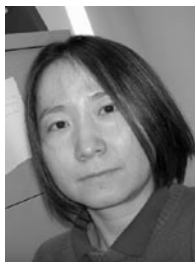
Steve Broglio graduated from the University of North Carolina at Chapel Hill in 2000 with a bachelor's degree in Exercise and Sport Science. During his time in North Carolina he began investigating sport-related mild traumatic brain injury. He continued this line of research at the University of Pittsburgh, graduating in 2002 with a master's in Health and Rehabilitation Science. Steve recently graduated from the University of Georgia with his doctorate in Exercise Science. Dr. Broglio's goal is to continue his research on sport concussion. His primary interests lie in the biomechanical forces associated with the injury and the cognitive, postural control, and symptomology outcomes of injured athletes.



Idethia Shevon Harvey earned her BS at Clemson University in Ceramic Engineering, an M.P.H. at Morehouse School of Medicine and a DrPH (Doctorate of Public Health) in Behavioral and Community Health Sciences and a Certificate in Public Health and Aging from the University of Pittsburgh. Dr. Harvey's research has largely investigated health disparities among older women of color and minority communities. Her research examined the role of religion and spirituality in the self-management of chronic illness among the aged. Dr. Harvey's future research will expand to explore the impact of information technology in health behavioral changes among older women of color.



Originally from South Korea, **Juhee Kim** came to U.S. to obtain a masters' degree in the Department of Nutritional Science at Cornell University. Since earning her degree, she has worked on obesity and community-based research in clinical and public health settings. While working at Cambridge (MA) Public Health Department and later at the Institute for Community Health, she received a Ph.D. in the Department of Society & Human Development and Health from the Harvard School of Public Health. Dr. Kim's area of interest is to understand the role of parents, family, and society on childhood well-being. She is especially interested in school-based intervention studies designed to improve nutrition and physical activity to prevent pediatric obesity. She recently extended her research interests to include the potential risk factors of



pediatric obesity during infancy and preschool years to prevent and control early childhood obesity.

Melissa Littlefield received her BA in English from Ithaca College in 2000 and master's degree in English from Penn State in 2002. She remained at PSU to complete her Ph.D. in English and Women's Studies in 2005. Littlefield has been a visiting assistant professor in the Gender and Women's Studies Program at U of I for the past year. She now has a dual appointment as an assistant professor in the Kinesiology and Community Health and English departments. She is interested in studying the intersection among cultural and scientific conceptions of normalcy, measurement, inscription and truth. She is currently writing a book on the cultural history and implications of truth technologies like biometrics, polygraphy, fMRI lie detection, and brain fingerprinting.



Diane Smith received a bachelor's degree in Occupational Therapy from the University of Illinois in 1982 and a Master of Science degree in Occupational Therapy (management track) from Washington University in St. Louis in 1996. She earned a Ph.D. in Public Policy Analysis from Saint Louis University in 2005. Her applied experience has included school system, inpatient and outpatient rehabilitation, and consultation with industries such as Walt Disney World. Dr. Smith's teaching experience has been primarily in occupational therapy with a focus on health care policy at Washington University and at Saint Louis University. Her research interests focus on gender and disability, primarily with regard to employment and policy.



SPEECH AND HEARING SCIENCE

Dr. Christopher Grindrod joins us from the Department of Cognitive and Linguistic Sciences at Brown University where he has been a Postdoctoral Research Associate since 2004. He holds a BA in French and Anthropology from the University of Western Ontario, and an MA in Linguistics and a Ph.D. in Communication Sciences and Disorders from McGill University in Montreal, Canada. Dr. Grindrod's teaching interests are in the areas of acquired language disorders and language processing. His research focuses on the neural basis of language comprehension, with a specific interest in the



role of the left and right cerebral hemispheres in integrating word meanings into higher-level sentence and discourse contexts.

RECREATION, SPORT AND TOURISM

Julie Stafford Son received a bachelor's degree in Psychology from Whitman College, a master's degree in Sociology with a cognate in Social Psychology from the University of Nevada, Reno and a doctorate in Leisure Studies with a minor in Gerontology from The Pennsylvania State University. Her primary research interests pertain to the leisure, health and well-being of middle-aged and older adults. Her recent research includes investigating alternative models of physically active leisure in later life, older women's leisure networks and health, and Native American elders' leisure-based self care.



DEAN'S OFFICE

Sheri Shaw, a 2002 graduate in community health, recently joined the College of AHS as a Program Coordinator. Sheri will advise students who are interested in AHS degree programs, with a focus on those from underrepresented populations. She will also assist with retention and probation issues, admissions, support services, and programming and planning. Shaw has worked on campus in various capacities before joining AHS. "This was a wonderful opportunity for me to come back and contribute to the college that got me to where I am now," she said. "It is the perfect combination of academics and student affairs."



LIFETIME FITNESS PROGRAM CONTINUES TO THRIVE, CONTINUED FROM PAGE 11

In addition to providing a supervised and supportive atmosphere for adults seeking a fitness routine, the program benefits researchers in the Department, providing them access to research subjects for the study of selected aspects of health and physical activity in older adults. "Just as Dr. Cureton started the program as an extension of his Physical Fitness Research Laboratory, today many of our participants volunteer for current research studies in the Department," shared Evans. "In addition, many individuals who participate in our research studies that require participation in an exercise program often want to stay with us after they "graduate" from the study. Our program provides this opportunity. It's a natural pairing."

The program also benefits graduate and undergraduate students by affording them the opportunity to enhance exercise program management and instructional skills, giving them a chance to apply the knowledge gained in the classroom.

"Students have an opportunity to apply what they have learned, and faculty have ready access to a pool of older adults who often volunteer for research studies," says Evans. "And of course it's a chance for the Department to provide a service to the community that has been very popular for many years. In this way, the program truly does help support the research, teaching and service missions of the University."

For more information about the Lifetime Fitness Program, visit their website at www.kch.uiuc.edu/outreach/lifetime.htm.



ANNUAL FUND

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Each year thousands of alumni and friends express their loyalty and interest in the people and programs of the University by making a donation.

Annual gifts touch every corner of the Urbana-Champaign campus—providing funds for scholarships and graduate student fellowships, student organizations, classroom renovation, instructional technology, student and faculty research projects, course development, and other academic initiatives.

If each graduate of the College of Applied Health Sciences gave an annual gift of just \$25, an additional \$350,000 would be available to support our students. Your gift, no matter its size, is greatly appreciated.

To make your gift online, please visit the University's secure website at www.giving.uiuc.edu.

Dr. Susan M. Bane ('89 MS, '95 Ph.D., Kinesiology) of Greenville, North Carolina, earned the Outstanding Community Physician Award from the 2006 graduating class of the Brody School of Medicine. The graduates choose the recipient based on excellence in teaching



as well as concern and compassion for students. Bane, an employee of Greenville Obstetrics, Gynecology and Pelvic Surgery, previously was a resident at the Brody School of Medicine's Department of Obstetrics and Gynecology. Currently a clinical faculty member at the Brody School of Medicine at East Carolina University, Bane is the instructor of a course that prepares students for the rigors of the residency program. She also lectures the students on exercise and pregnancy. She is currently conducting research on physician career satisfaction, especially focusing on female physicians and balancing career and family issues.

Jody Clasey ('84 BS, '87 MS, '93 Ph.D., Kinesiology) of Lexington, Kentucky, is an associate professor in the College of Education's Department of Kinesiology and Health Promotion at the University of Kentucky. She was one of six UK professors to be honored with 2006 Great Teacher Awards from the UK Alumni Association. Students nominate professors for the honor, which, in its 45th year, is the longest continuous running award to recognize excellence in teaching at the University of Kentucky.



Ann Cody ('92 MS, Recreation, Sport and Tourism) of Washington, D.C., was given the General Association of International Sport Federation's (GAISF) 'Spirit of Sport Award' for her services in the sport field. Cody is a member of the International Paralympic Committee Governing Board and is the chairperson of the group's Women in Sport Committee. Recipients of the award were nominated by their federations for contributions in their particular sports fields.



Norma Dycus ('75 MS, Kinesiology) of Fairborn, Ohio, was elected secretary of the women's division of the National Junior College Ath-



letic Association (NJCAA). Dycus is the athletic director at Sinclair Community College in Dayton, Ohio. She has held many positions in the NJCAA ranks including serving as the Region 12 director since 1991. In 2004, Dycus received the NJCAA Loyalty Award and was named the Athletic Administrator of the Year by the National Association of Collegiate Athletic Women Administrators in 2001.

Lou Ann Lemaire-Pyle ('75, BS, Community Health) of Indianapolis, Indiana, recently received the Hope Award from the Mental Health Association of Hamilton County for her work in helping to develop and implement the PAIR



Mental Health Diversion Program in Hamilton County. The PAIR Program is focused on diversion to treatment from the criminal justice system after arrest in cases of minor offenses. Lou Ann has worked in the Crisis Department of BehaviorCorp, Inc. for 24 years having worked in the capacity of Supervisor of Crisis and Central Intake since 1992. BehaviorCorp is a community mental health center serving Indianapolis and the surrounding counties.

Kathleen Presgrove ('71 BS, Speech and Hearing Science) of Marietta, Georgia, was awarded the 2006 Georgia Speech Language Hearing Association "Honors of the Association" in recognition of Outstanding Performance and Contribution. Kathleen worked as a Speech Language Pathologist at Atlanta Speech School, Inc. for 31 years before retiring in 2004. She has also been active for decades in the Greater Atlanta Voice Masters (a club for throat cancer patients and those with laryngectomies) and the Atlanta Hears Chapter of Self Help for Hard of Hearing.



Kendra ('74 BS Kinesiology) and **John Smiley** ('71 BS, Kinesiology), of East Lynn, Illinois, have published a book entitled *Be the Parent* (Moody, 2006). They had the opportunity to share tips from their book on a regular segment on the "Sunrise News" program that aired prior to Good Morning America on ABC channel 15 in Champaign. The 5-minute segments aired on Mondays for six consecutive weeks in the spring.



APPLIED HEALTH SCIENCES PRE-GAME HOMECOMING PARTY

Join alumni, faculty, staff, and students of the College of Applied Health Sciences for a celebration prior to the Illinois vs. Indiana Homecoming football game. Door-prizes will be awarded, and a complimentary continental breakfast is available for all attendees. Celebrate the past, present and future of the College of Applied Health Sciences with both old and new friends.

DATE: Saturday, October 7, 2006

TIME: 9 a.m.–11 a.m.

LOCATION: 114 Huff Hall
(1206 S. Fourth St., Champaign, Illinois)



For a complete list of Homecoming activities and football ticket information, go to WWW.AHS.UIUC.EDU



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