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Record

Nov. 29, 2007

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Washington University in St. Louis

National political spotlight to shine again on WUSTL 2008 vice presidential debate Oct. 2 marks fifth selection by CPD

Calling it "one of the great traditions of Washington University," Chancellor Mark S. Wrighton announced during a news conference Nov. 19 that the University will host the 2008 vice presidential debate, scheduled for 8 p.m. Oct. 2.

This is the fifth consecutive time the University has been selected by the Commission on Presidential Debates (CPD) to host a debate. Washington University is the only institution to host more than two debates.

In 1992, the University hosted the first three-candidate presidential debate in CPD history, was selected to host a presidential debate in 1996 that eventually was canceled, hosted the third and last presidential debate of the 2000 campaign season and the second of three presidential debates before the 2004 election.

"It is a privilege to once again play an important role in the American electoral process and to be chosen from among 19 applicants to be one of the hosts and

the site of the only vice presidential debate for the 2008 election season," Wrighton said during the news conference at the Field House, which by next October will be transformed into a debate site.

The debate will focus on both domestic and foreign policy and will be administered by a single moderator.

"These one-of-a-kind events are great experiences for our students, they contribute to a national understanding of important issues, and they allow us to bring national and international attention to our great community," Wrighton said.

All tickets to attend the debate are assigned by the CPD. As was done in 1992, 2000 and 2004, any debate tickets that may be assigned to the University will be distributed only to full-time students, who will be selected in a University-wide lottery, Wrighton said.

Students also will have the opportunity to volunteer to become involved with the debate as well



Chancellor Mark S. Wrighton announces the University's selection as the site for the Oct. 2, 2008, vice presidential debate. With him in the Field House of the Athletic Complex — where the debate will be held — are Jennifer Sisto, speaker of the Congress of the South 40, and Neil Patel, Student Union president.

as take part in the political conversations that surround such an event.

The debate "is going to be a part of the campus culture," said Jennifer Sisto, a sophomore bio-

engineering major and speaker of the Congress of the South 40.

"Students will become more involved in discussions outside of the debate itself, and clearly after the debate there will be a lot of

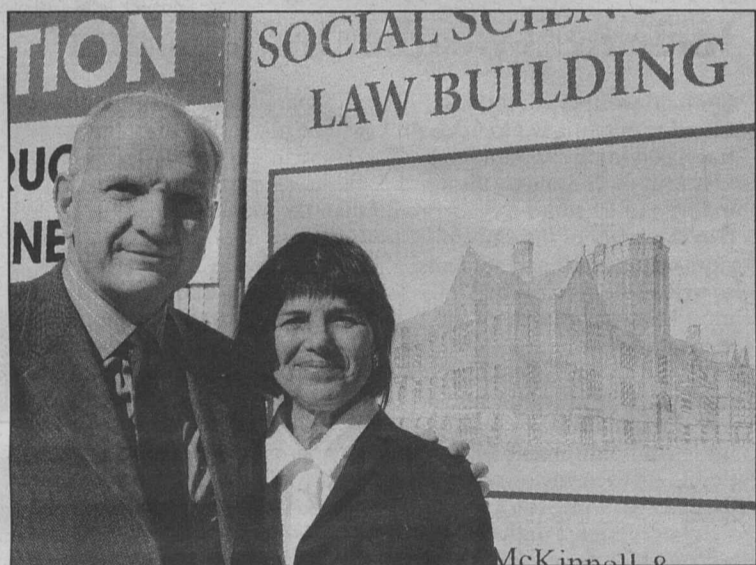
reaction around campus."

Neil Patel, a senior in Arts & Sciences and Student Union president, remembers the impact the 2004 debate had on both him and the campus. That fall, Patel, then a freshman, decided he would major in political science rather than business.

"The current events at the time and the debate just brought out an interest that I didn't have before," he said. "The debate is just one day, but the debate arena, the hype around it, lasts for weeks. It's in the paper. On your way to class, you see public figures.

"Living in St. Louis, it's more difficult to get involved in national politics than it would be living in D.C.," he said. "Having the debate here is like dropping D.C. in the middle of St. Louis." Both Sisto and Patel participated in the news conference.

The University again is offering the same facilities that were made available for the 1992, 1996, See Debate, Page 6



Harry and Susan Seigle visited campus last month and surveyed the progress of the building that will bear their names.

Seigles provide major commitment for social sciences/law building Seigle Hall to be dedicated in fall 2008

By BARBARA REA

A \$10 million commitment has been made to Washington University by alumnus and philanthropist Harry Seigle and his wife, Susan, according to Chancellor Mark S. Wrighton. It is the lead gift for the building currently under construction on the western end of the Danforth Campus that will serve academic functions for the three social science departments in Arts & Sciences and for the School of Law.

The Boston-based architectural firm Kallmann McKinnell & Wood designed the Collegiate Gothic facility. It will occupy 145,736 square feet and contain 14 classrooms, the most of any Danforth Campus building.

When it opens for the fall 2008 semester, it will be known as

Harry and Susan Seigle Hall. The name is significant, for it represents the first academic building on the Danforth Campus to be named for an alumnus living outside of St. Louis.

"When considered alone, Harry and Susan Seigle's commitment for our new building is a significant contribution to the future of this University," Wrighton said. "When considered as the most recent of a series of major gifts to this institution, it is an extraordinary show of support. We are incredibly fortunate to receive their generous gifts."

Wrighton is referring to the large number of gifts supporting programs, scholarships, facilities and, in 2005, a professorship in Arts & Sciences that have been given over the years by the Seigles.

See Seigles, Page 6

Fat cells send message that aids insulin secretion

By GWEN ERICSON

The body's fat cells help the pancreas do its job of secreting insulin, according to School of Medicine research. This previously unrecognized process ultimately could lead to new methods to improve glucose metabolism in type 2 diabetic or insulin-resistant people.

In a study using laboratory mice, published in the Nov. 7 issue of Cell Metabolism, School of Medicine scientists report that fat cells release a protein that aids insulin secretion from pancreatic beta cells,

which are the sole source of insulin. The protein is an enzyme that the pancreatic cells themselves produce in only minimal amounts. The enzyme works to enhance glucose-stimulated insulin secretion from pancreatic beta cells.

Insulin helps the body process blood sugar (glucose), and those with type 2 diabetes have a deficiency of insulin or a resistance to its effects. More than 7 million people in the United States are living with a diagnosis of type 2 diabetes, and many more are undiagnosed.

See Cells, Page 6

Volleyball team wins ninth national title

The WUSTL volleyball team defeated the University of Wisconsin-Whitewater, 3-2, to win the NCAA Div. III Championship in Bloomington, Ill., Nov. 17. The title is the team's NCAA-best ninth and its first since the 2003 season.

Head coach Rich Luenemann, who won his 900th match as a collegiate head coach earlier in the NCAA tournament, won the second NCAA title of his career. Afterward, the team celebrated on the court along with fans who made the 3-hour drive to Bloomington, including Chancellor Mark S. Wrighton.

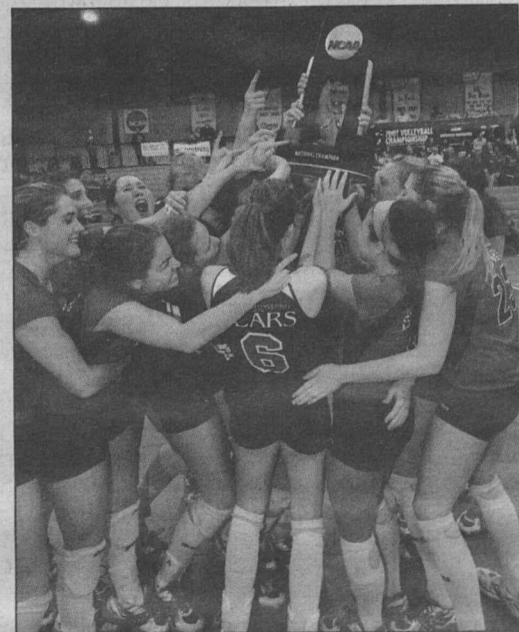
Senior outside hitter Haleigh Spencer and junior setter Audra Janak were named to the NCAA All-Tournament Team. Junior outside hitter Alli Alberts earned NCAA Championship MVP honors.

En route to the championship, the Bears defeated five teams ranked in the American Volleyball Coaches Association top 15 and in each of the final three rounds defeated a team they have lost to earlier in the year. The Bears defeated University Athletic Association (UAA) rival No. 3 Emory University, 3-1, in the quarterfinal Nov. 15 and top-ranked and previously unbeaten Wittenberg University, 3-1, in the semifinal Nov. 16.

The Bears ended the season on a six-match winning streak, with their last loss coming to Emory, 3-2, in the UAA championship Nov. 3.

What made the title all the sweeter is that the team had a rough start, beginning the season with a 7-4 record. However, the Bears would lose only one more match — against Emory in the UAA championship — en route to the title.

"You have to understand how proud I am of this team," Luenemann said. "This group has worked



The Bears hoist the championship trophy.

harder than any team that I have ever coached. We were not a strong team at the beginning of the year, but we came into practice, worked hard at getting better and fought through it. If any team is deserving of winning a national championship, it is this group."

For a slide show of the celebration go to record.wustl.edu/news/page/normal/10615.html.

University exceeds United Way goal

\$571,064 raised as of Nov. 19

By JESSICA DAUES

Thousands in the St. Louis community will benefit from the generosity of Washington University's faculty, staff and retirees.

The University has raised \$571,064 in its United Way of Greater St. Louis campaign, surpassing its stated goal of \$555,000.

"Our success as an institution in raising money for the needs of St. Louis speaks to the truly generous spirit of the Washington University community," said Chancellor Mark S. Wrighton. "I am grateful to all of those in our community who chose to make a contribution during this year's United Way campaign."

The University's campaign kicked off in September and reached its targeted dollar amount in early November, just as the United Way of Greater St. Louis celebrated its record-breaking, \$68.8 million drive.

"Every year, the University community steps up its efforts to support United Way-funded agencies, and 2007 has been no exception," said Ann Prenatt, vice chancellor for human resources and campaign chair.

"The United Way and the Uni-

versity are grateful to faculty, staff and retirees who opened their hearts and wallets to help others these past few months," she said.

"I also would like to thank the campaign leaders and volunteers for their hard work and support of this campaign," Prenatt said.

Although the University has reached its goal, it will continue to accept pledges throughout the year. Faculty and staff members who would like a pledge card should contact Lisa Caress at

935-6087 or caresslisa@wustl.edu.

Last year's WUSTL drive raised more than \$550,000, exceeding the stated goal of \$540,000, and helped the United Way of Greater St. Louis raise \$66 million in 2006.

Ninety percent of contributions to the United Way of Greater St. Louis — one of the country's

highest assistance rates — go directly to more than 200 organizations that provide services for people living in 16 Missouri and Illinois counties.

Such services include job counseling and job training, affordable child care, disaster relief, violence prevention and more.

For more information on the United Way of Greater St. Louis, visit stl.unitedway.org.

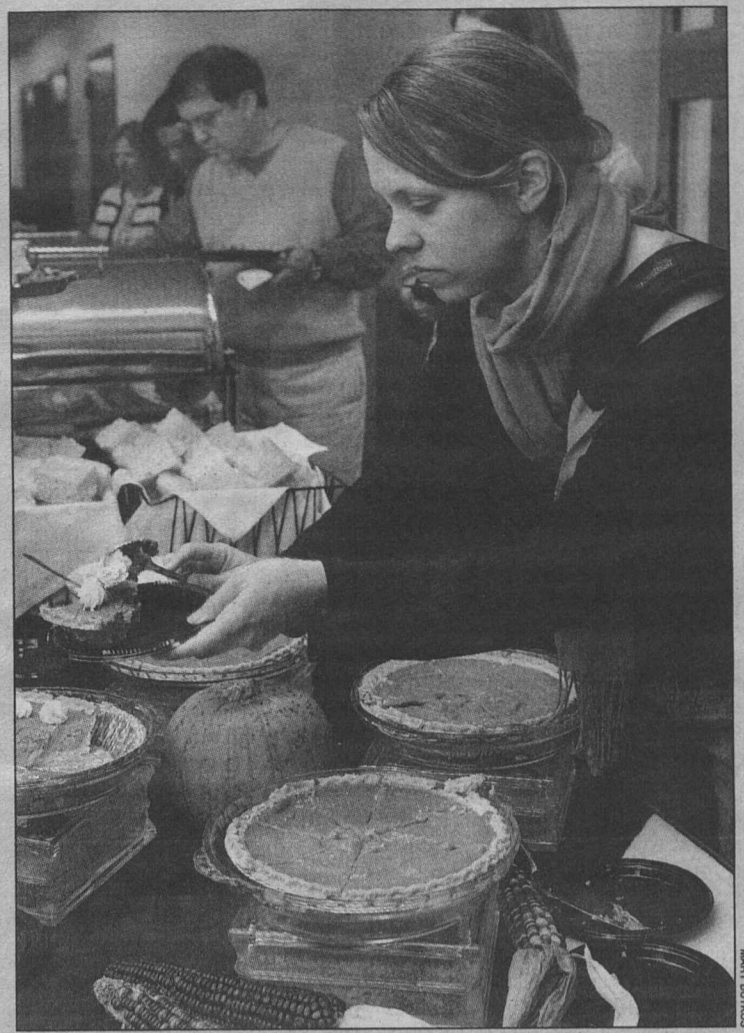
"Our success as an institution in raising money for the needs of St. Louis speaks to the truly generous spirit of the Washington University community."

MARK S. WRIGHTON

A WUSTL Thanksgiving

Because many students and faculty are not able to go home for the Thanksgiving holiday, a variety of traditional holiday dinners are held around campus throughout the break and in the time leading up to it. At right, first-year graduate student Christy Hudson helps herself to some pumpkin pie at the George Warren Brown School of Social Work Dinner held Nov. 18 in Brown Hall Lounge. In the background is Edward F. Lawlor, Ph.D., dean and the William E. Gordon Professor, who attended along with about 200 others. The dinner was the largest one yet sponsored by the School of Social Work.

Below, Olin Business School alumna Shen Zhao (MBA, 2004) goes through the buffet line Nov. 22 at the annual Olin Thanksgiving Day dinner at the Charles F. Knight Executive Education Center. The event was bursting at the seams, Olin officials said, attracting more than 400 students, faculty and alumni.



MARY BIRTUS



MARY BIRTUS

Kumon mathematics fills gap in education system

By TONY FITZPATRICK

Parents of school-aged children might consider giving their children an enduring holiday gift this year: enrollment in a supplemental mathematics program.

While it may be costly, the results of practicing mathematics daily is rewarding to both students and parents. Children gain self-esteem and confidence; parents feel a sense of relief and pride in their children's accomplishment.

Three popular supplemental programs are Singapore, Saxon and Kumon. Many home-school practitioners use the first two, and Kumon, which involves daily practice and some tutoring, is popular with parents who feel schools might be letting their kids down.

Dan Kimura, Ph.D., senior professor of computer science and engineering, opened the first Kumon center in St. Louis in 1984 in large part because of his disappointment in the math education his sons were getting. Mathematics is a major foundation of computer science, and Kimura, whose specialty is software programming, took action.

Begun in Kimura's hometown of Moriguchi, Japan, in 1958 by the late Toru Kumon, a math teacher who invented it to help his sons, Kumon math has more than 4 million students enrolled worldwide in 43 countries, nearly 180,000 in the United States. The method stresses repetition, speed, accuracy, individual pace, hard work and goal orientation.

Students are tested then begin at a comfortable learning level, working with paper and pencil on a series of calculations devised to

reinforce what they learn. They master a learning phase at their own pace, pass a timed test and go on to another level. They do problems at home daily for 15 to 30 minutes and meet weekly with Kumon instructors for a half-hour to 45 minutes. Gradually, after much positive reinforcement, Kumon practitioners gain self-confidence and, if they stick with the program, their mathematics progress invariably improves greatly, Kimura said.

Kimura said the reason many parents are seeking supplemental help for their children in mathematics is the American method of teaching and the contents taught.

"The philosophy in American schools is a bottom-up approach, where the basic assumption is that every child has the innate ability to learn, the purpose of education is to help kids grow, that the direction they take is rooted in their DNA and that cannot be altered, and that teachers and parents should facilitate this growth process," Kimura said.

"There is a sense that you can't force students to learn, that it stifles creativity. The best a teacher can do is to suggest that students learn certain things, but students shouldn't be forced," Kimura said.

What's missing, Kimura said, is the concept of training.

"The Kumon method is based on training and is a top-down approach that stresses achieving goals," he said. "The process of practice and training is very painful. Top-class athletes and musicians will tell you that, too. Kids may not like it, but kids don't see the goals. They do, however, feel the satisfaction of achieving a goal. Parents are the immediate beneficiaries of

Kumon math. They see the goals, and they see the progress."

Kimura said that there are two stages in acquiring knowledge: thinking and knowing. For example, $3 + 2 = 5$. Students trained in Kumon math or in another context, once they are in the knowing stage, know that automatically.

In contrast, he said, the way that the simple calculation is taught in schools today is to attach "3 + 2 icons," such as apples, to the numbers so that students supposedly grasp the concept.

"From the beginning, American students are exposed to the applications of mathematics," Kimura said. "In my humble opinion, that is not teaching mathematics, rather the applications of mathematics. The philosophy in Kumon is that you have to learn mathematics before applying it."

The transition to the knowing stage is speed, Kimura said, calling it perhaps the most vital tenet of the method.

"The Kumon method stresses the syntax of mathematics, not the semantics, which is opposite of the way mathematics has been taught in America for several decades," Kimura said. "In the schools today, learning revolves around student-centered curricula: the teacher creates a social environment that stresses education, citizenship and self-esteem, which are, indeed, worthy learning components. From this environment, the student is expected to construct his own body of knowledge. But this is like teaching a child to play tennis by telling him to create his own method. It de-emphasizes the concept of training."

Inclement weather information

Should weather conditions create potentially hazardous travel conditions, Washington University will evaluate the situation and take into consideration the safety of the University's faculty, staff and students as well as the services that must be provided despite the inclement weather.

In the unlikely event that the University alters the normal work and/or class schedule, an announcement will be posted on the University's home page (wustl.edu), and a number of media outlets also will air an announcement.

Separate announcements will be made regarding the Danforth Campus (which includes all campuses other than the Medical School Campus), the Medical School Campus and evening school classes. These announcements will apply only to Washington University students, faculty and staff.

The media outlets that would air such an announcement are KTVI-TV Channel 2, KMOV-TV Channel 4, KSDK-TV Channel 5, WSIE-FM (88.7) and KMOX-AM (1120).

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School of Medicine Update

Increasing tumors' radiation sensitivity moves closer to reality

BY GWEN ERICSON

To make tumors more sensitive to the killing power of radiation is a key aspiration for many radiation oncologists. School of Medicine researchers have uncovered new information that leads them closer to that goal.

In an upcoming issue of the journal *Molecular and Cellular Biology*, the researchers report the first extensive study of an enzyme called MOF that helps control how DNA is packaged in cells. The researchers show that MOF is an essential factor for tumor development, and they say it may be possible to manipulate the enzyme to make tumors more sensitive to radiation therapy.

MOF adds a tag — a special chemical group — to the spools that hold the long strands of DNA in the chromosomes. The spools, made of proteins called histones, pack the genetic material into a more condensed form. By adding a tag at a precise location on one kind of histone, MOF helps relax the tight packing of genes and thereby influences how active the genes are.

Although many enzymes are involved in controlling chromosome structure to maintain cells' genetic machinery, MOF is so essential that without it cells inevitably die.

"We think that if we can deplete MOF in tumor cells, but not in healthy cells, we will gain a therapeutic advantage," said Tej K. Pandita, Ph.D., associate professor of radiation oncology and

of genetics and a researcher with the Siteman Cancer Center. "If we affect MOF in tumor cells, they will be weakened and unable to recover after radiation exposure."

Pandita and his research group focus on ways to increase the radiation sensitivity of cancer cells to enhance the cure rate of radiation therapy. They became interested in MOF because it was

previously found to be involved in genomic instability and defective DNA damage repair.

Other studies have suggested that loss of the histone tag created by MOF is a hallmark of cancerous cells. In this study, however, an analysis of more than 300 tumor samples

demonstrated that all tumors had either normal or increased amounts of MOF and the histone tag compared to normal samples. When the researchers caused MOF to be more abundant than usual in cells, the cells proliferated faster and showed telltale signs of cancerous transformation. When the same cells were injected into mice, tumors from cells that had an overabundance of MOF grew faster than other tumor cells.

The study also demonstrated that cells with less MOF were more sensitive to radiation exposure. Now the researchers are trying to identify inhibitors of MOF that block its ability to tag histones specifically in tumor cells.

"Our research on MOF shows that it is a component that is absolutely needed for cells to proliferate," Pandita said. "It could be

the Achilles' heel of cancerous growth."

The research group plans further studies that will clarify how MOF functions and what other cellular components it interacts with. "Using this kind of information, we can more logically approach the issue of making cancerous cells more sensitive to radiation," Pandita said.

"Our aim is to achieve a balanced therapeutic adjunct that can keep normal tissue healthy while weakening tumor cells."

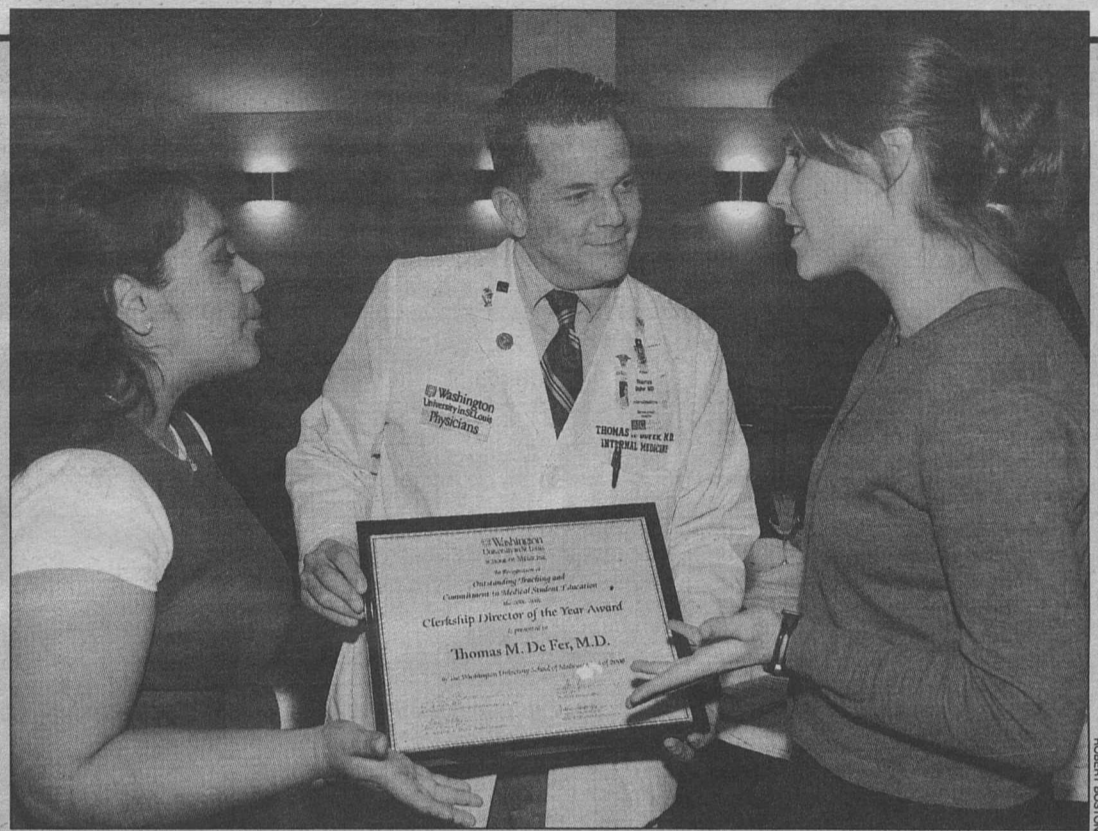
The research also demonstrated that MOF is vital for the development of embryos. It showed that primitive cells, called stem cells, in mouse embryos have high amounts of MOF, and without MOF they

stop growing.

Like cancer cells, stem cells divide rapidly. "Evidence is accumulating to suggest that cancer cells could be considered aberrant stem cells," Pandita said. "MOF is a factor that is common to both embryonic stem cells and cancer cells and ensures their ability to proliferate rapidly."



Pandita



Award-winning faculty (From left) Noopur Gangopadhyay, a fourth-year medical student, talks with Thomas De Fer, M.D., associate professor of medicine, and Kari Wanat, also a fourth-year medical student, at the Distinguished Service Teaching Awards Nov. 8 at the Eric P. Newman Education Center. The Class of 2008 awarded De Fer the Clerkship Director of the Year award. Among other winners were Gladys Tse, M.D., assistant professor of obstetrics and gynecology, who was named Clinical Lecturer of the Year by the Class of 2008, and the Department of Medicine, which was named the Clinical Department of the Year.

Kemp to lead \$11 million Gates Foundation grant

BY BETH MILLER

James S. Kemp, M.D., professor of pediatrics, will co-lead a campaign to prevent infant death due to unsafe sleep practices with funding from an \$11 million grant from the Bill & Melinda Gates Foundation.

The grant, awarded to Baltimore-based First Candle, a non-profit organization promoting infant health, will support a national campaign called "Bedtime Basics for Babies." The campaign includes distributing cribs to families in need and educating families about the benefits of using cribs and crib safety.

More than 2,500 sudden infant deaths occur each year in the United States. According to First Candle, babies who sleep in adult beds are at up to 40 times greater risk of dying than babies sleeping on their backs in a crib. In fact, in many jurisdictions, a shared sleep surface is implicated in more than 50 percent of all sudden, unexpected infant deaths.

Kemp, who returned to the University and St. Louis Children's Hospital Nov. 1, is co-principal investigator with Rachel Moon, M.D., associate professor of pediatrics at The George Washington University School of Medicine and Health Sciences and a pediatrician at the Children's National Medical Center.

Kemp said First Candle will

use this as a pilot study and eventually implement such a program nationally.

Focusing on the states of Indiana and Washington and the District of Columbia, the researchers expect to distribute about 200,000 cribs to families in need in an effort to promote safe infant sleep practices and reduce infant mortality.

"Babies in poor families tend to share beds, either with parents or other children," Kemp said. "Some parents believe bed sharing somehow protects their baby during sleep. There is no evidence to support this theory. To the contrary, there is much evidence that shows the adult bed, as we know it in the United States, can greatly increase the risk of SIDS and other sleep-related deaths, such as from accidental suffocation."

In the education component, researchers will show families how to assemble a crib, discuss why cribs are important and how to use them safely.

"We will be looking at the impact of making cribs available to families and encouraging them to put the babies to sleep on their backs, which should have an impact on sudden death during sleep," Kemp said. "This is one big area that needs to be better understood."

First Candle said with proof that such campaigns can save babies' lives simply by putting them to sleep in a safe crib rather than adult beds and other unsafe places, the project has the capacity to change child-care practices nationwide, possibly saving thousands of lives.

Molecular Imaging Center gets \$10 million renewal grant

BY MICHAEL C. PURDY

The Washington University Molecular Imaging Center has received a five-year, \$10 million grant from the National Cancer Institute.

The grant will fund a second cycle of research at the innovative center, where scientists from different specialties collaborate on advanced imaging projects. Initiatives at the center include an effort to help researchers track the spread of gene therapy for cancer and projects to closely monitor the contributions of key genes to the start of tumors.

"A number of research projects from the first grant have led to

technology and approaches to imaging that we're now leveraging to answer major biological questions in this second grant," said the center's director, David Piwnica-Worms, M.D., Ph.D., professor of radiology and of molecular biology and pharmacology.

Piwnica-Worms is a co-investigator on a Molecular Imaging Center project led by John F. DiPersio, M.D., Ph.D., the Lewis T. and Rosalind B. Apple Professor of Medicine. DiPersio treats difficult cases of leukemia, lymphoma and other cancers with bone-marrow transplants. The transplants sometimes lead to a potentially fatal complication called graft-versus-host disease (GVH), where the transplanted cells begin to attack the patient.

"We'll be looking for potential correlations with an eye to one day determine by positron emission tomography that graft-versus-host disease is starting even before clinical symptoms become apparent."

DAVID PIWNICA-WORMS

As a failsafe against this serious complication, DiPersio has developed a way of incorporating a "suicide gene" that can cause the transplanted cells to self-destruct. Scientists activate the gene by giving patients a drug.

Using radiolabeled tracers developed at the Molecular Imaging Center, scientists can now track where cells from the bone-marrow transplants go in the body through whole body imaging with positron emission tomography (PET).

"We know from mouse models that there are some different patterns of cell trafficking that seem to predict GVH," Piwnica-Worms said. "Obviously, we can't currently make human treatment decisions based on these kinds of patterns. But we'll be looking for potential correlations with an eye to one day determine by PET that GVH is starting even before clinical symptoms become apparent."

In another project, researchers led by Lee Ratner, M.D., Ph.D., professor of molecular microbiol-

ogy and of medicine, will use a genetically engineered mouse line to study the roots of tumor formation. The mice have a mutated copy of a gene called *Tax* that is linked to the formation of cancers. In a research project during the Molecular Imaging Center's first five years, scientists added the genetic coding for a luminescent protein from fireflies to the mutated *Tax* gene. Now when the mice develop tumors linked to *Tax*, the tumors will glow, giving researchers the chance to study tumor development at its earliest stages.

Scientists led by Helen Piwnica-Worms, Ph.D., professor of cell biology and physiology and of medicine, will probe cells' progression through the various stages of their life cycles. Helen Piwnica-Worms and her colleagues are using molecular imaging to better understand how delays in the processes of replication are created, allowing cells to inspect their own DNA for damage that could lead to cancer.

Raphael Kopan, Ph.D., professor of molecular biology and pharmacology and of medicine, leads a fourth project that will examine how a protein called Notch contributes to cancer. This project will use a high-throughput screening core that allows rapid testing of compounds for desirable interactions with a target molecule. Kopan's group wants to identify potential pharmaceutical treatments that prevent Notch from helping cancers.

In addition to research activities, the center's new grant includes funding for support of postdoctoral and graduate students.



Kemp



Piwnica-Worms

Notables

Introducing new faculty members

The following are among the new faculty members at the University. Others will be introduced periodically in this space.

Jeff Gill, Ph.D., joins the Department of Political Science and the Center for Applied Statistics, both in Arts & Sciences, as professor. He earned a bachelor of arts degree from the University of California, Los Angeles, a master's degree in business administration from Georgetown University and a doctorate from American University. He served as a postdoctoral fellow at Harvard University. His major areas of research include political methodology, American politics, statistical computing, research methods and public administration.

Gill's current research is focused on projects such as Bayesian hierarchical models, Markov chain Monte Carlo theory, bureaucratic behavior in national security agencies and issues in political epidemiology. He serves as director of WUSTL's Center for Applied Statistics and is vice president of the Society for Political Methodology.

Caitlin Kelleher, Ph.D., joins the School of Engineering as assistant professor of computer science and engineering. She recently completed a postdoctoral fellowship and earned her doctorate in computer science at Carnegie Mellon University. Her research is in the area of human-computer interaction, and her work focuses on the design, development and evaluation of a programming system for middle-school girls called "Storytelling Alice." This program includes high-level animations that enables users to program social interactions and features a gallery of characters and scenery designed to spark story ideas and a story-based tutorial.

Peter Schmelz, Ph.D., joins the Department of Music in Arts & Sciences as assistant professor. Peter earned a bachelor of arts degree from The George Washington University in 1995 and a master's degree and doctorate from the University of California, Berkeley, in 1997 and 2002, respectively. For the past four years, he served as assistant professor of musicology at the University at Buffalo, State University of New York. His primary area of interest is 20th-century music (especially music after 1945), with a focus on the music produced in Russia and the Soviet Union, including that by Dmitri Shostakovich and Alfred Schnittke. His secondary areas of research include popular music and popular culture (both American and Russian), music and the Cold War, and music and politics more broadly.

Roya Beheshti Zavareh, Ph.D., joins the Department of Mathematics in Arts & Sciences as assistant professor. She earned a bachelor's degree from Sharif University of Technology in Iran in 1999 and a doctorate from Massachusetts Institute of Technology in 2003. After completing her doctorate, she did postdoctoral research at Max-Planck Institute in Germany, Queen's University in Canada and the Mathematical Sciences Research Institute in Berkeley, Calif. Her main area of research is algebraic geometry.

National ranking for architecture graduate school

By LIAM OTTEN

Washington University's Graduate School of Architecture & Urban Design, part of the Sam Fox School of Design & Visual Arts, has been ranked fifth in the nation by Architect magazine in its first annual education survey.

The survey, published in the November issue, examined 117 programs recognized by the National Architectural Accrediting Board. WUSTL tied for fifth with Virginia Polytechnic Institute and State University (Virginia Tech) in Blacksburg, Va., and was ranked first in the Midwest.

"This ranking reflects the strong contributions that our graduates are making to the prac-

tice of architecture," said Bruce Lindsey, dean of the Graduate School of Architecture & Urban Design and the E. Desmond Lee Professor for Community Collaboration. "The survey asks a cross-section of employers about which recent graduates have had the most significant influence on their work. It's a powerful testament to the impact of our young alumni."

The survey polled directors of design, managing principals and human resource directors from hundreds of leading U.S. architecture firms about which programs had produced the most professional, best-prepared graduates over the past five years. It also queried participants — as well as deans and current students —

about how programs rated in various skill sets, including design, sustainability, analysis and planning, construction methods and materials, research and theory, communication skills and computer applications.

"A long-standing complaint — a cliché, really — about architectural education is that the typical curriculum places insufficient emphasis on the pragmatics of professional practice," wrote Architect editor Ned Cramer in his forward to the issue.

"Yet the academy seems to be gaining ground on the marketplace," he wrote.

"While many green-minded firms, for instance, still struggle to adopt the LEED (Leadership in Energy and Environmental De-

sign) certification process and get buy-in from clients, the survey results suggest that universities are proving more nimble: 57 percent of firms surveyed say that they get new ideas about sustainability from their straight-out-of-school employees."

The magazine's rankings are excerpted from an annual book-length report titled America's Best Architecture & Design Schools, published by the journal Design-Intelligence.

The survey, which was launched in 2000, is conducted for DesignIntelligence by Greenway Communications and the Design Futures Council.

Last year, Washington University was ranked sixth in the nation by DesignIntelligence.

2007 Olin Cup Competition finalists announced

By SHULA NEUMAN

From home-delivered soup to house calls, the finalists for the 2007 Olin Cup Competition were announced Nov. 8. Six teams, including four student-owned or student-supported ventures, remain in the annual business formation contest organized by the Skandalaris Center for Entrepreneurial Studies.

This year's finalists were selected from a field of 12 teams. Ultimately, two teams will win up to \$70,000 in seed investment capital and a student-owned or -supported team will win a \$5,000 cash prize. Two new Olin Cup sponsors, RubinBrown and Senniger Powers, will provide additional awards of in-kind services, bringing the total awards up to nearly \$100,000.

This year's finalists (* indicates student-owned or student-



supported venture):

- Human Equity*, an online equity market that invests in students and their education;
- IsThatOneGood*, a Web site that draws on users' opinions to generate relevant and accurate product recommendations and meaningful discussion;
- Magnetic Connection Technologies*, which is developing a technology to change the way consumers plug in cords and screw in light bulbs;
- Medi-bite*, a disposable physical therapy device aimed at restoring jaw function to people afflicted with jaw-joint injury;
- Personal Pediatrics, a retain-

er-based house call practice method that provides HIPAA-compliant, boutique, patient-focused health care;

• Soup Says It All, which packages chicken noodle soup in a mug with a cloth napkin and metal spoon as a "thinking of you" gift they will ship anywhere in the United States.

A description of the proposals can be found on ideabounce.com. The finalists will submit business plans and make final presentations to judges in January. Winners of the 2007 Olin Cup will be announced at a public event Feb. 7.

"The number of student submissions increased this year, and we were pleased with the quality in this year's competition," said Ken Harrington, Managing Director of the Skandalaris Center. "Programs like IdeaBounce and Coffee With The Experts seem to be really helping the region's idea-

stage entrepreneurs. Olin Cup progress signals the continued growth of the entrepreneurial environment on campus."

The Olin Cup competition was founded in 1988 as part of The Hatchery entrepreneurship course at the Olin School of Business. The competition began awarding up to \$70,000 in seed funding in 2001 with the support of the Skandalaris family. In 2005 the competition began awarding the best student teams a \$5,000 prize.

In 2003, the Kauffman Foundation selected WUSTL as one of eight U.S. universities to share \$25 million in grants through a program designed to make entrepreneurship education available across campuses and transform the way entrepreneurship is viewed, taught and experienced. WUSTL received a \$3 million grant and now has 37 course offerings spanning all degree types and levels.

Wu cited for 'very best' Chinese language course

By GERRY EVERDING

Fengtao Wu, a senior lecturer in Chinese in Arts & Sciences, offers one of the nation's "very best" university courses in Chinese, according to a recent College Board Advanced Placement World Languages Best Practices Course Study.

Conducted by the Eugene, Ore.-based Educational Policy Improvement Center (EPIC), the College Board study identified Wu's third-level "Modern Chinese II" course as one of the nation's top 10 "best practice" courses in Chinese.

Wu's course and others selected on the

basis of exemplary teaching practices will be used as models for the redesign of the College Board's equivalent college-level Advanced Placement course in Chinese.

Wu earned a master's degree from Indiana University Bloomington in 1987 and taught there before joining the Department of Asian and Near Eastern Languages and Literatures in Arts & Sciences.

He has been teaching Chinese, including elementary, intermediate

and advanced levels as well as calligraphy, for about 25 years.

Wu has taught advanced courses in the summer immersion program of Indiana University and has been lead teacher for the past nine years for Level IV language instruction at the Chinese Summer Intensive Program at Middlebury College.

Wu also served several times as language director for a joint Washington University-Duke University study program in China.

He has published a set of textbooks for beginners and intermediate students and is working on a book about Chinese grammar.



Wu

For the Record

Of note

Jose L. Bermudez, Ph.D., professor of philosophy, has received a one-year, \$28,100 grant from the National Science Foundation to fund a U.S.-China workshop in Beijing on the theme "Memory and Language: Interdisciplinary Perspectives." ...

Christina L. Fales, Ph.D., postdoctoral research associate in psychology in Arts & Sciences, has received a two-year, \$60,000 grant from the National Alliance for Research on Schizophrenia and Depression for research titled "Reactive Cognitive Control and Emotion Dysregulation in Generalized Anxiety Disorder." ...

Robert H. Koff, Ph.D., director of the Educational Skills Ini-

tiative and the Center for Advanced Learning, and **Christine Duden Street**, assistant director of Disability Resources, have received an 18-month, \$100,000 grant from the National Science Foundation for research titled "RDE-DEI: Developing and Evaluating a Peer Led Team Learning Curriculum in Calculus and Chemistry For Undergraduate Students with Learning and Attention Disabilities." ...

Anna MacKay, graduate student of psychology, has received a \$5,000 Elderhostel K. Patricia Cross Doctoral Research Grant from Elderhostel, a nonprofit organization dedicated to providing extraordinary learning adventures for people 55 and over. The grant honors the work of K. Patricia Cross, Ph.D., a former Elderhostel board member, and aids doctoral

students researching topics relevant to aging and later-life learning. The grant will be used for research titled "Training Attention Control in Older Adulthood." ...

Rohit Pappu, Ph.D., associate professor of biomedical engineering, has received a two-year, \$300,000 grant from the National Science Foundation for research titled "Conformational Equilibria of Intrinsically Disordered Proteins." ...

Joshua S. Reece, graduate assistant in biology in Arts & Sciences, has received a \$4,000 Young Explorers Award from the National Geographic Society for research titled "Conserving Biodiversity in Coral-Reef Fish: Moray Eels as Indicator Species." ...

Amy Q. Shen, Ph.D., assistant professor of mechanical engineering, and **William F. Pickard**,

Ph.D., senior professor of electrical and systems engineering, have received a three-year, \$240,000 grant from the National Science Foundation for research titled "Interplay of Biosensing and Locomotion in Confined Microfluidic Environments."

Obituary

Blumenthal, 94

Herman T. Blumenthal, Ph.D., M.D., research professor of gerontology in psychology in Arts & Sciences from 1971-1996, died of cardiac arrest Monday, Nov. 5, at St. Mary's Health Center in Richmond Heights, Mo. He was 94.

Washington People

Adults often advise young people to pick a career with growth potential. Nobody ever set out to be the last medieval armor fabricator, dodo bird veterinarian or dirigible mechanic. But unfortunately, when it comes to eating disorders and obesity research, there's no danger the field will go extinct any time soon.

In 1976, almost half of all American adults were overweight and about 15 percent had medically significant obesity. Today, the percentage overweight is almost two-thirds, and more than 30 percent of adults are obese. It's a growing problem in kids, too. While the obesity rate has doubled in adults during the last 30 years, it has tripled in children.

When it comes to eating disorders, between 5 million and 10 million Americans suffer from anorexia nervosa, bulimia nervosa or binge eating disorder. Anorexia rates have remained pretty much constant for the past century, but bulimia and binge eating disorder seem to be increasing at roughly the same rates as obesity.

Fortunately, Denise E. Wilfley, Ph.D., director of the Weight Management and Eating Disorders Program at the School of



Denise E. Wilfley, Ph.D. (left), discusses research projects with Meghan Sinton, Ph.D., a postdoctoral research scholar. "My program of research indicates that interpersonal factors play a significant role in binge eating disorder among obese people," Wilfley says. "That's also true for other eating disorders and with childhood overweight. So if we're going to develop more effective treatments for eating disorders or for adults and children with obesity, we need to address both individual behavior and the social context in which the problem occurs."

BY JIM DRYDEN

Looking to trim down obesity

Denise Wilfley tackles one of the country's biggest health problems

Medicine, enjoys the challenge of finding effective treatments for significant public health problems such as obesity and eating disorders.

"I have aimed throughout my career to study the causes, characteristics and treatment of obesity and eating disorders," says Wilfley, professor of psychiatry, medicine and pediatrics at the School of Medicine and professor of psychology in Arts & Sciences. "And since an important risk factor for the development of eating disorders is being overweight in childhood, I believe it's important to study the whole range of problems with eating — from anorexia nervosa to obesity — across all age ranges — from childhood throughout life."

She's also passionate about training the next generation of clinicians and researchers in her field, and her laboratory is bustling with graduate students, fellows and junior faculty. She says her personal and professional relationships help the research to move forward, and she has found that relationships also are important to the individuals whose problems she studies and treats.

"My program of research indicates that interpersonal factors play a significant role in binge eating disorder among obese people," she says.

"That's also true for other eating disorders and with childhood overweight. So if we're going to develop more effective treatments for eating disorders or for adults and children with obesity, we need to address both individual behavior and the social context in which the problem occurs."

Wilfley and her colleagues recently published a study in the *Journal of the American Medical Association* where she found that when overweight children lose weight, they keep it

off more effectively if they also participate in a maintenance-targeted treatment program. A particularly promising maintenance approach is called social facilitation maintenance (SFM), which presumes that children need to be in a social environment that supports continued weight control. The SFM treatment guides parents to encourage their kids to be friends with physically active peers and to ensure that play dates with existing friends involve physical activity and healthful eating.

Wilfley is particularly interested in finding effective, long-term treatments for obese and overweight children because if the condition appears in childhood, the complications of obesity — from heart disease to diabetes, certain cancers, stroke, sleep apnea and high blood pressure — could begin to appear earlier in life. So instead of developing serious problems in their 50s and 60s, children who grow up obese may find themselves having heart attacks, experiencing diabetes-related vision loss or requiring treatment for colon cancer when they're in their 30s or 40s.

"In addition, overweight children are also at risk for eating disorders because they tend to have a negative body image and more weight concerns," she says. "If we leave kids to their own devices, they may think they should lose weight by skipping meals or eliminating certain types of food, and those unhealthy approaches can backfire and contribute to problems down the road. So we try to get families involved in positive exercise habits and food choices to improve the health of everyone in the home."

Ongoing projects

Wilfley is a principal investigator on several large, National Institutes of Health-funded research projects. The research program provides training for undergraduate and graduate students, fellows and junior faculty members. The projects also provide much-needed treatment and prevention services to the people who take part in the studies. Not long ago, Wilfley was recognized for her laboratory's productivity with a Midcareer Investigator

Award in Patient-Oriented Research from the National Institute of Mental Health.

Her laboratory spans the spectrum of eating and weight disturbances, from helping overweight children maintain weight loss to studying psychological treatments for those who struggle with binge eating disorder to studies of family therapy and antidepressant medication in the treatment of anorexia nervosa.

Much of her research focuses on developing novel treatment and prevention approaches. For example, her team is working with an Internet-based intervention called Student Bodies that helps college-aged women with weight and shape concerns develop better emotional regulation and an improved body image. The idea is that an improved body image and better mood regulation skills should reduce the risk of eating disorders and related problems, such as depression, binge drinking and substance abuse.

"Denise brings tremendous experience and innovation to her studies of eating disorders and childhood obesity. Her work is at the leading edge of the field in terms of diagnosis, prevention and treatment," says Charles F. Zorumski, M.D., the Samuel B. Guze Professor and head of the Department of Psychiatry and professor of anatomy and neurobiology. "Obesity represents a major contributor to health-care costs in our country and, along with depression, nicotine dependence and alcohol abuse, is one of the primary areas where behavioral and psychiatric interventions can have a large impact on public health."

Returning home

A native St. Louisan, Wilfley returned to the area in 2002 from San Diego where she was director of the Center for Eating and Weight Disorders. After spending her early years in St. Louis, Wilfley's family moved to Fulton in central Missouri. After earning her degrees, she spent her career on both the East and West Coasts, at Stanford University, Yale University and the University of California, San Diego/San Diego State University Joint Doctoral Program.

She decided to return to the Midwest at the suggestion of her husband, Robinson Welch, Ph.D., also a psychologist, assistant professor of psychiatry and fellow

obesity and eating disorders researcher.

"We started seriously considering it when our son, Wil, was about a year-and-a-half old," Wilfley recalls. "We wanted him to be closer to my family. I really loved the ocean, but my husband reminded me that the beach would be there forever, but my parents wouldn't."

That statement took on deeper significance when Wilfley's father, Donald, passed away several months ago. But Wilfley's mother, Arlene, is doing well, still living near Fulton, along with all four of Wilfley's siblings, who settled within 10 minutes of Arlene.

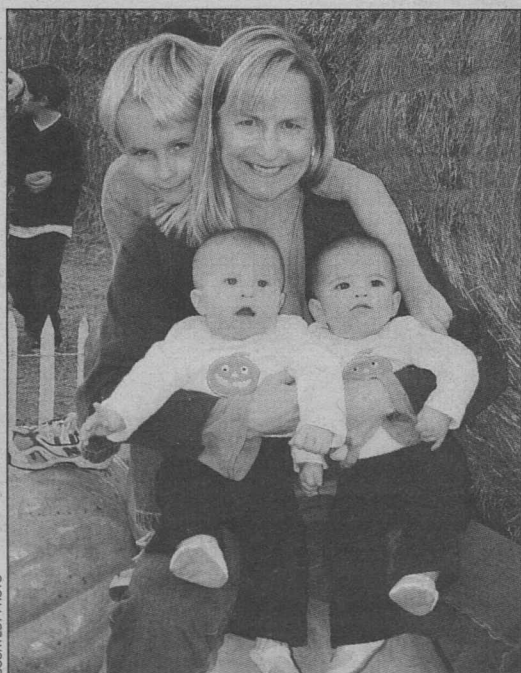
"My little boy has a lot of cousins to play with," she says.

At 7 years old, he also has two new sisters to play with, Ella and Emma, both seven months old. It's a good time for Wil because seven is his favorite number, and for a few weeks, everybody has that number in their age.

That number also would seem to be just about the number of minutes of rest that Wilfley and Welch get as they raise a young family and pursue their research. But she does find time to run with friends in Forest Park, take the kids hiking at Castlewood State Park and the river area of Grafton where they often go for family bike rides.

"We've even had the twins out in a bike trailer, and they seem to like it," she says.

They also spend time at places like The Muny, the Saint Louis Zoo and at youth soccer games. And they haven't had to give up the ocean completely. With in-laws in San Diego, body surfing and boogie boards are never too far away.



Denise E. Wilfley and her children at a pumpkin patch: Wil and twins Emma (left) and Ella.

COURTESY PHOTO

ROBERT BOSTON

Denise E. Wilfley

Born: June 29, 1960, St. Louis, Mo.

Education: Bachelor of science with honors, psychology, 1982, Central Missouri State University; master's degree, counseling psychology, 1984, and doctorate in counseling psychology with an emphasis in health psychology, 1989, University of Missouri-Columbia

Postdoctoral training: Fellowship, 1990, Stanford University

Family: Son Wil Welch, 7; daughters Emma and Ella Welch, 7 months; husband Robinson Welch, Ph.D.; mother Arlene Wilfley