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Record

Jan. 26, 2001

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Washington University in St. Louis

Elliot Stein, member of the Board of Trustees, dies

By JESSICA N. ROBERTS

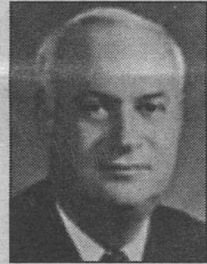
Elliot H. Stein, a member of the University's Board of Trustees, died Jan. 16 at his home of complications from Parkinson's disease. He was 82.

A beloved member of the University community and 1939 alumnus of the School of Business, Stein was elected to the Board in 1968 and served as a key member of the Executive Committee since 1975.

"He was always kind; he was always positive; he was always helpful," said William H. Danforth, vice chairman of the Board and chancellor emeritus. "I have never known anyone so good at looking out for other people's interest, both their individual

interest and the interest of their institutions."

As former chairman and member of the Nominating Committee for 25 years, Elliot was highly instrumental



Stein: Board of Trustees member

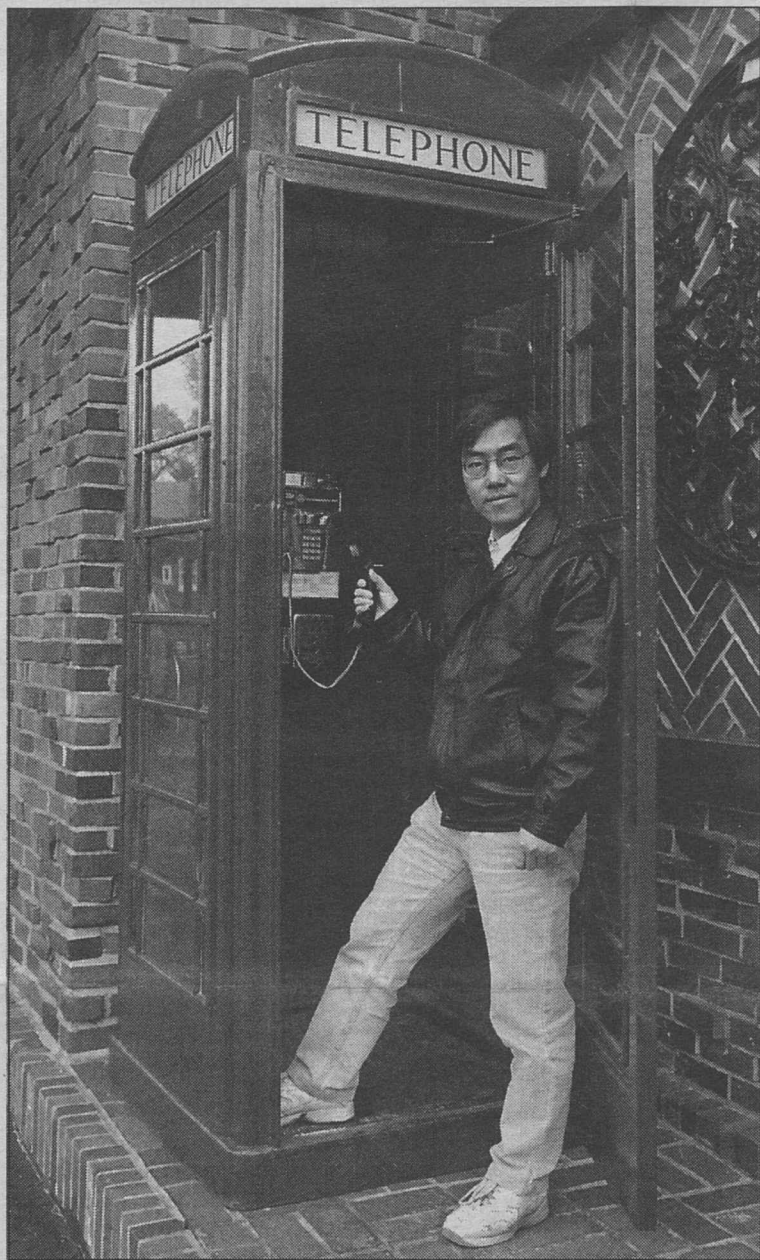
in attracting many other distinguished Trustees to the University's service. His tenure on the Investments Committee and on the Development Committee spanned his 32 years of exemplary trusteeship.

Stein's influence extended throughout the St. Louis community. As a successful broker and investment banker, he served on numerous boards of publicly owned corporations, becoming the confidante of many St. Louis business leaders.

A resolution passed by Ralston Purina's board when Stein stepped down after 17 years of service accurately reflected the St. Louis business community's regard for Stein's service as a corporate director: "His dignified and thoughtful counsel to management, as well as his ability to focus on the important issues, helped to make Elliot Stein the consummate director."

A St. Louis native, Stein graduated from Clayton High School and enrolled in the School of Business. After three years of courses there and a semester in

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Weixiong Zhang, Ph.D., associate professor of computer science, applied an algorithm to an old computing and business nemesis called the Traveling Salesman Problem. One of the TSPs involved finding the best route for pay phone coin collectors.

Computer science's Zhang tackles old Traveling Salesman Problem

By TONY FITZPATRICK

It was a combination of things, physical and metaphysical, that killed Arthur Miller's traveling salesman, Willie Loman.

Now a University computer scientist has developed and tested an algorithm that might at least have made Loman's roads traveled a little easier. Weixiong Zhang, Ph.D., associate professor of computer science, has developed an algorithm that attacks an old problem in the computing and business worlds known as the Traveling Salesman Problem (TSP).

An algorithm is the backbone of computer operations; it is a step-wise mathematical formula, similar to a recipe, that solves a

problem or reaches an otherwise desired end. TSP is actually an umbrella term for a whole host of planning and scheduling problems, often involving routes; a classic one being a postman's route, for instance.

Zhang is currently working with AT&T Bell Labs collaborator David S. Johnson, Ph.D., a leading expert in the area of computational complexity. They have applied the algorithm bearing Zhang's name to 10 theoretical TSPs and found it to be the best solution for half.

One of the problems that AT&T Bell Labs is concerned with involves the routes of pay phone coin collectors. In this case, Zhang's algorithm maps a route

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International social work students aim to bring knowledge back home

By ANN NICHOLSON

Seven social work students from emerging democracies in Asia, including parts of the former Soviet Union, will be among their homelands' first professionally trained social workers leading the struggle to improve harsh living conditions. The Open Society Institute (OSI) Fellows at the George Warren Brown School of

Social Work are part of a new Network Scholarship Program to teach these international students the latest social work research and practice techniques.

Part of the Soros foundations network, OSI is a private operating and grant-making foundation that seeks to promote development and maintenance of open societies around the world through

educational, social and legal reform.

"The scholarship program is designed to professionally train outstanding candidates as social workers to implement reform, create policy and foster the development of social work in the recently independent nations of Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Mongolia and

See Students, Page 6

Bears hold heads high after The Streak of 81

By ANTHONY WILSON

They called it "The Streak."

But perhaps to give the women's basketball team's consecutive-win tear of 81 games such a simple name is trivializing the grandeur of the accomplishment.

Consider this: Even the greatest teams throughout history have never won 81 straight games. In 1980, the mighty Russians succumbed to a rag-tag bunch of fellows deemed USA Hockey. The all-powerful English soccer team of 1950 dropped a match to the Americans in perhaps the greatest upset in sports history. Even the Buffalo Bills showed that coming back from a 32-point deficit with less than 14 minutes remaining is not impossible.

And yet the Washington University Bears never experienced a loss. For all but five members of women's team, Jan. 16 was the first day they had ever lost a collegiate basketball game. So perhaps they could be excused if they were confused about how to react, or where to go or what to do after they walked off Fontbonne's court and into the visitor's locker room on the short end of a score - 79-68 - for the first time since Feb. 15, 1998.

They weren't. They shook hands with the Griffins and made their way through those celebrating the near-impossible - a

victory over the across-the-street rivals. The Bears walked into the locker room, listened to a short talk from head coach Nancy Fahey, showered, dressed and walked out. Their heads were held as high as when they walked in, and their voices didn't waver when they stared into the bright lights of TV cameras.

Although smiles were undetectable, there was a stolid look of determination. They may have fallen just seven games short of tying perhaps the most prolific record in basketball, but they had won 81 consecutive games, still the longest women's basketball win streak ever and the closest anyone has come to John Wooden's famous 1971-74 UCLA men's squads.

The Bears were proud of what they had done.

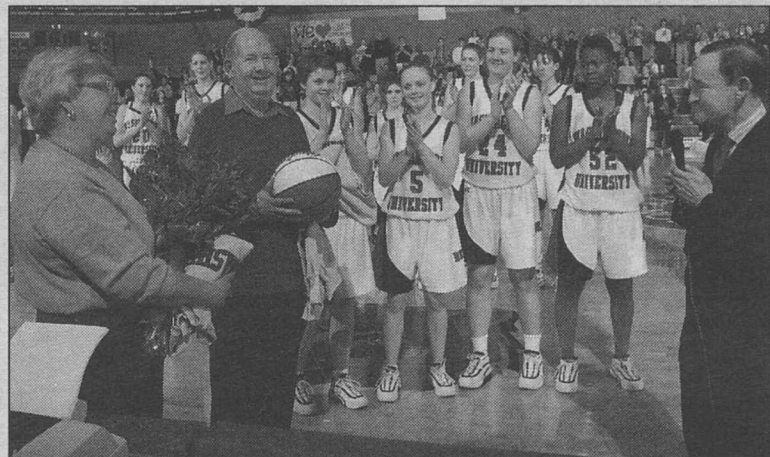
"I kept telling myself, 'If you project an image of strength, you will be strong,'" said senior Sara Ettner, the Bears starting shooting guard. "I kept telling myself to be strong and proud."

The Streak produces stories and legendary players

What is easily forgotten among The Streak hubbub are the team and individual accomplishments achieved along the way.

Three of those 81 wins came in national championship games.

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Art and Marge McWilliams (left) receive thanks from the women's basketball team and from Chancellor Mark S. Wrighton (right) at the Jan. 19 Bears game after Wrighton announced the McWilliams' gift of \$500,000 for a new women's tournament.

McWilliams' gift to create new women's tournament

By BARBARA REA

Art and Marge McWilliams, veteran boosters of University athletic programs, will sponsor an annual women's basketball tournament. The inaugural Washington University McWilliams Basketball Classic will be held this fall.

The commitment of \$500,000 for the new tournament was announced by Chancellor Mark S. Wrighton at the Bears' Jan. 19 game at the Field House.

"At the very top of any list of

Washington University athletic boosters, you will find the names of Art and Marge McWilliams," Wrighton said. "They have followed Bears teams across the country. They have supported a veritable 'Who's Who' of scholar-athletes on this campus. They take tremendous pride in the accomplishments of all our athletic teams and in the achievements of each young man and woman who competes on these teams. They are an extraordinary example of everything that is

See Tournament, Page 2



Student proposal Jo Noero, the Ruth and Norman Moore Professor of Architecture (left), and Cynthia Weese, dean of the School of Architecture (right), examine graduate student Kwanghyun Baek's proposed academic building. Noero and Peter MacKeith (center) co-taught the semester-long studio "Contemporary Architecture and the University: Studies in Progressive Contextualism," which examined the role of contemporary design in historically sensitive environments.

Tournament

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good about college sports."

"We believe we already have the top women's basketball program in the country with our players, their parents, our coaches and our athletic director," Art McWilliams said in announcing the gift. "Hopefully, this annual classic will help Nancy Fahey and her assistant coaches continue to recruit the top scholar-athletes."

"We are very grateful for all that Art and Marge McWilliams have done for Washington University, and we are especially appreciative of their new commitment to enhance the student experience here," Wrighton said.

In addition to their support of sports and recreational programs, the McWilliamses are longtime benefactors of the Olin School of Business. Art is a 1949 business school graduate, and the couple has supported several of its programs, including scholarships. They established the Art and Marge McWilliams Endowed Scholarship Fund for the Olin School, benefiting many students.

The McWilliamses are members of the Washington

University Sports Hall of Fame and have been integral in the resurgence of the varsity sports program. They have been active members of the W Club, a support organization for athletics; Art has served on its executive committee and as chair of its Eliot Society Committee. In 1995, the couple provided funds to construct the McWilliams Fitness Center in the Athletic Complex.

Art McWilliams is retired from BDO Seidman, a St. Louis accounting firm.

"The McWilliams' gift pays tribute to our outstanding women's basketball program," said John M. Schael, director of athletics. Schael noted that the McWilliams' sponsorship provides equal stature for the women's team, as its male counterpart has enjoyed the Lopata Classic tournament, created in 1984 by a gift from Lucy and the late Stanley Lopata.

"We are grateful for Art and Marge McWilliams' interest, encouragement and support," Schael added. "Their wonderful generosity will provide the University's student-athletes as well as other student-athletes from across the country with opportunities for achievement, fellowship, sportsmanship and spirited competition."

Undergraduate tuition increases 4.9% for 2001-02; room-and-board charges up 6.3%

Undergraduate tuition will total \$25,700 for the 2001-02 academic year — a \$1,200 (4.9 percent) increase from this year.

In addition, the required student activity fee will be \$257 and a new annual universal health fee of \$420 will go into effect, said Barbara A. Feiner, vice chancellor for finance.

Room-and-board charges will be \$8,670, an increase of \$514 (6.3 percent) over this year's charges for newer housing. Last year's charges were \$8,156.

Graduate and professional programs, University College and summer school tuition will also increase next year. (see box)

The universal health fee results from the University's commitment to the health and wellness of all students. A campus-wide task force evaluated health care and benefits offered to students and found that on-campus health and counseling services and wellness programs needed improvement. The new insurance plan addresses these needs and adequately and equitably covers students on- and off-campus, on breaks or traveling abroad.

In a letter to parents and students, the University said: "... Every year we search for new ways to manage our costs, and our combined tuition and fees are lower than most of the private universities with which we are compared. For example, we are converting our heating and cooling to distributed energy systems, which will help us control our growing costs for electricity and natural gas.

"Our success at raising gift support and the size of our endowment might suggest to some that more of our costs should be covered by these revenue sources. However, in combination they provide only about 18 percent — much of which is restricted by the donors to specific purposes not applicable to undergraduate program support.

"Others have suggested that we could realize increased revenue by enrolling greater numbers of students and thereby avoid annual increases. Unfortunately, doing so would reduce our ability to offer superlative classes and outstanding co-curricular experiences to students. We believe in getting better, not bigger. Our academic quality helps us attract the remark-

Graduate and professional programs

2001-02 full-time tuition rates

- Graduate School of Arts & Sciences and graduate programs in the School of Architecture and the School of Engineering and Applied Science: \$25,700, a \$1,200 increase over the current charge of \$24,500.

- School of Art graduate programs: \$21,575, a \$1,025 increase over the current charge of \$20,550.

- George Warren Brown School of Social Work graduate program: \$20,910, a \$960 increase over the current charge of \$19,950.

- School of Law: \$27,100, a \$1,410 increase over the current charge of \$25,690.

- John M. Olin School of Business graduate program: \$28,300, a \$1,300 increase over the current charge of \$27,000.

- School of Medicine: Tuition for 2001-02 for the M.D. degree will be set in March.

Evening and summer school 2001-02 tuition rates

- Undergraduates: For undergraduate evening students enrolling in University College in Arts & Sciences or continuing education classes in the School of Architecture in 2001-2002, tuition will be \$295 per credit hour, compared with the 2000-01 cost of \$270 per credit hour.

- Graduate studies: Depending upon the graduate program in University College in Arts & Sciences, tuition will range from \$295 to \$485 per credit hour for 2001-02, compared with the current range of \$270 to \$465.

- Summer school in Arts & Sciences: Tuition in summer school classes in Arts & Sciences will be \$430 per credit hour for summer 2001, compared with the 2000 summer school rate of \$380 per credit hour.

able students we are so fortunate to have, and record-setting numbers of applicants seek to come here because of our personal atmosphere and accessible faculty.

Our costs grow faster than the Consumer Price Index (CPI),

because the expense of improving learning does not match the CPI indicators that are limited to goods and services. This is true for most colleges and universities in the United States, due to the need for investment in better instruction,

improved facilities, and innovative programs."

The letter detailed some campus enhancements in progress or completed, including:

- New courses and majors for undergraduates;
- A new Arts & Sciences curriculum;
- Attracting and retaining the best faculty;
- New and improved housing and classroom buildings;
- Better instructional technology and tools in classrooms, labs and computer centers.

The letter also noted that these advances and improvements expands the appeal and value of the University for current and prospective students, "...but at a cost that in part must be covered by those who benefit from them."

Students receiving need-based financial assistance — 60 percent of the University's undergraduates — will receive consideration for the tuition increases. Family financial circumstances at the time students apply to renew their financial aid packages will also be considered, and payment plans may be implemented.

The Streak

Loss to Fontbonne only a small bump in road

— from Page 1

Some coaches and players dream of capturing just one national title; but with the Bears, a win streak somehow reduced three titles to No. 8, No. 38 and No. 68.

It's not just the championships that will be remembered, however. Players such as Alia Fischer, the only women's basketball player to win three consecutive national player of the year awards, or Beth Reuther, the NCAA record-holder for three-point percentage in a game (8 for 8 vs. Sewanee, 1998), or Angie Kohnen, one of the best rebounders WU has ever seen.

"I know about players that graduated five years ago," said freshman center Suzy Digby. "I

hear the silly stories about all the alums, and it gives us a sense of tradition."

The legend of The Streak will live on by its statistics. In the 81 games, the Bears defeated opponents by an average of nearly 24 points, and only 10 opponents came within single digits of the Bears' total.

In the three championship games, the Bears defeated

Southern Maine 77-69 in 1998, St. Benedict 74-65 the following year, and Southern Maine 79-33 in 2000. That 46-point win set a record for the biggest margin in championship history — in any division, men or women.

"When I was being recruited, I knew about the winning streak and the statistics

of it," said freshman guard Lesley Hawley. "It helped me know that WU was a winning program and a place I wanted to be."

A New Beginning

Practice resumed as usual Jan. 17, the day after the Fontbonne loss. As if scripted, practice consisted only of upperclassmen, the majority of the core of the 81 wins, because the younger players were at a junior varsity game. That day's lesson plan was no harder or easier than any other — the players ran hard and listened harder.

An air of self-doubt existed, but it was overshadowed by an even stronger sense of determination to begin anew, to prove that WU is the best team in the country and that the night before was merely a stumble in the road. The Bears eagerly awaited their next game, a University Athletic Association battle vs. Brandeis three days away.

"I wanted to play that Brandeis game the next day," Fahey said. "I wanted to get the loss over with and get back on track."

Above all, the team felt renewed, as if the pressure were off. They no longer had to worry about interviews and the feeling, as Ettner put it, of "...what if we lose?"

"It became fun for us

again," Ettner said. "Warming up for Brandeis, I thought, 'We're on a losing streak,' and it gave me more resolve. It was a new motivation now — to end that losing streak."

And end it they did. In front of 1,086 raucous and supportive fans, some sporting T-shirts that said '81' and many others bearing gifts of roses, came out to see the Bears pulverize Brandeis, 85-36.

As if that weren't enough, two days later the Bears blew away the country's No. 2-team, New York University, 72-37.

After all the attention the women received for their 81-game win streak, one loss didn't take away everything accomplished. The Bears are still the No. 1 team in the country, they still have a 52-game home win streak, and they are still in the hunt for a fourth consecutive national title, something only two other NCAA basketball teams have accomplished.

Even though the Bears didn't get to 89, they are a team history will remember.

Record

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Washington University in St. Louis

Medical School Update

First complete DNA sequence of a plant generated

BY DAVID LINZEE

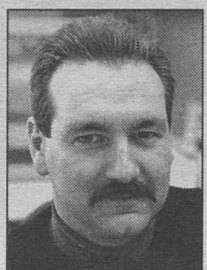
School of Medicine researchers are part of a team that has generated the first complete DNA sequence of a plant. The team sequenced the genome of *Arabidopsis thaliana*, a flowering mustard.

Because *Arabidopsis* is a widely studied model organism, its sequence will enable scientists to study genes that control basic plant functions. This knowledge will be useful for improving important crops such as wheat, corn and soybeans. It also will aid the ongoing effort to identify genes in the human sequence.

The milestone is reported in the Dec. 14 issue of the journal *Nature*. The Arabidopsis Genome Initiative, an international consortium, performed the

research. All data is available on the Internet (www.arabidopsis.org/home.html).

Under the direction of Richard K. Wilson, Ph.D., associate



Wilson: Genetics researcher

professor of genetics, the medical school's Genome Sequencing Center played a two-part role in the project. During the early stage, it constructed a genome map that was used by all the sequencing centers. In collaboration with Cold Spring Harbor Laboratory in New York and the John Innes Centre in the United Kingdom, it then se-

quenced chromosomes 4 and 5. *Arabidopsis* has five chromosomes.

Arabidopsis is a small plant that grows readily in the laboratory. Its unusually compact genome has just 125 million base pairs — the building blocks of the genome — compared with wheat's 15 billion. Both plants have approximately the same number of genes — *Arabidopsis* has 25,498, the researchers discovered — but wheat contains many more repeated sequences.

Information gained from the sequence may provide a basis for improving important crop plants through breeding or genetic engineering. Such improvements might include foods that last longer on supermarket shelves, are lower in fat or higher in protein or are tastier.

It also might help make crops

hardier. Analysis of the sequence suggests that cell signaling pathways that respond to bacteria, parasites and other external threats are more abundant in plants than in other organisms. "Just as animals have immune systems, plants have ways of protecting themselves, too," Wilson explained. "As scientists begin to understand the genes that code for protective proteins, they may be able to make plants more resistant not only to diseases but to insects, wind and drought."

Scientists are comparing the *Arabidopsis* sequence to other fully sequenced genomes, including those of yeast, fruit flies and roundworms. By uncovering the genetic basis for similarities and differences between organisms, such work may shed light on evolution. For example, certain *Arabidopsis* genes appear to have

moved to new locations within the genome. Further study may show how such genetic reshuffling has occurred in other organisms as well, giving them specific advantages in their environments.

The new data also will help scientists interpret the working draft of the human genome because many genes that perform basic functions have been retained during evolution. Knowing the locations and functions of *Arabidopsis* genes will allow scientists to pinpoint similar human genes and learn more about the causes of many disorders. "Gaining a better understanding of the functions genes perform in cells, whether plant or animal, is going to help us understand how to diagnose and treat diseases in humans," Wilson said.

New hepatitis C replication method will enable scientists to study disease

BY DAVID LINZEE

Scientists studying the virus that causes hepatitis C have found a way to grow it rapidly in the lab so they can perform genetic studies on it.

The inability to replicate the virus quickly and reliably in cell cultures had been a serious handicap to progress against the disease, which affects approximately 170 million people worldwide. In the United States, hepatitis C is the leading cause of liver transplants.

"This is a strong, workable system that we can use to learn how this poorly understood virus causes disease and to develop drugs against it," Keril J. Blight, Ph.D., said.

Blight is first author of a paper that reports the results in the Dec. 8 issue of the journal *Science*. She is a research associate in the lab of Charles M. Rice, Ph.D., professor of molecular microbiology at the School of Medicine.

The current combination therapy against hepatitis C — interferon plus ribavirin — fails to cure 80 percent of those infected. About 20 percent of people with chronic infection develop cirrhosis of the liver, which often leads to liver failure and, in some cases, liver cancer. But little is known about how the hepatitis C virus eludes destruction by the immune system and establishes a chronic infection.

Building on previous work with RNA, the genetic material of the virus, Rice's group inserted altered viral sequences into human liver cells. The researchers identified many mutations that enabled the virus to start reproducing more efficiently. The mutations clustered in the gene for a nonstructural protein called NS5A.

Nine of the alterations were "spelling" mistakes in the gene for NS5A. The 10th was the deletion of a long piece of the gene. Many of the 10 mutant RNAs reproduced thousands of times more effectively in cultured cells than did the unmutated RNA of the virus.

The researchers suggest that human liver cells in culture might contain a protein that interacts with part of NS5A to prevent the virus from multiplying. When the viral protein becomes altered, the interaction no longer can take place, and replication proceeds full tilt. Hepatitis C virus mutated in the NS5A region therefore will permit laboratory studies, including those that might lead to a vaccine.

"For the first time, powerful genetic and genomics approaches can be used to unravel the molecular details of hepatitis C virus replication and its interaction with host cells," Rice said. "We hope that this technology will speed up both fundamental research and drug discovery."

Pacemaker study needs volunteers

People with a history of heart failure might be eligible for a new School of Medicine study that will test whether a special pacemaker can improve survival rates and quality of life.

The new pacemaker regulates both sides of the heart, making them contract at precisely the same time. "It's been shown that making the heart beat in a more synchronized fashion may help patients feel better long-term," said Gregory A. Ewald, M.D., assistant professor of medicine.

To be eligible, patients must have had moderate or severe heart failure for at least six months and have been hospitalized in the past year for the condition.

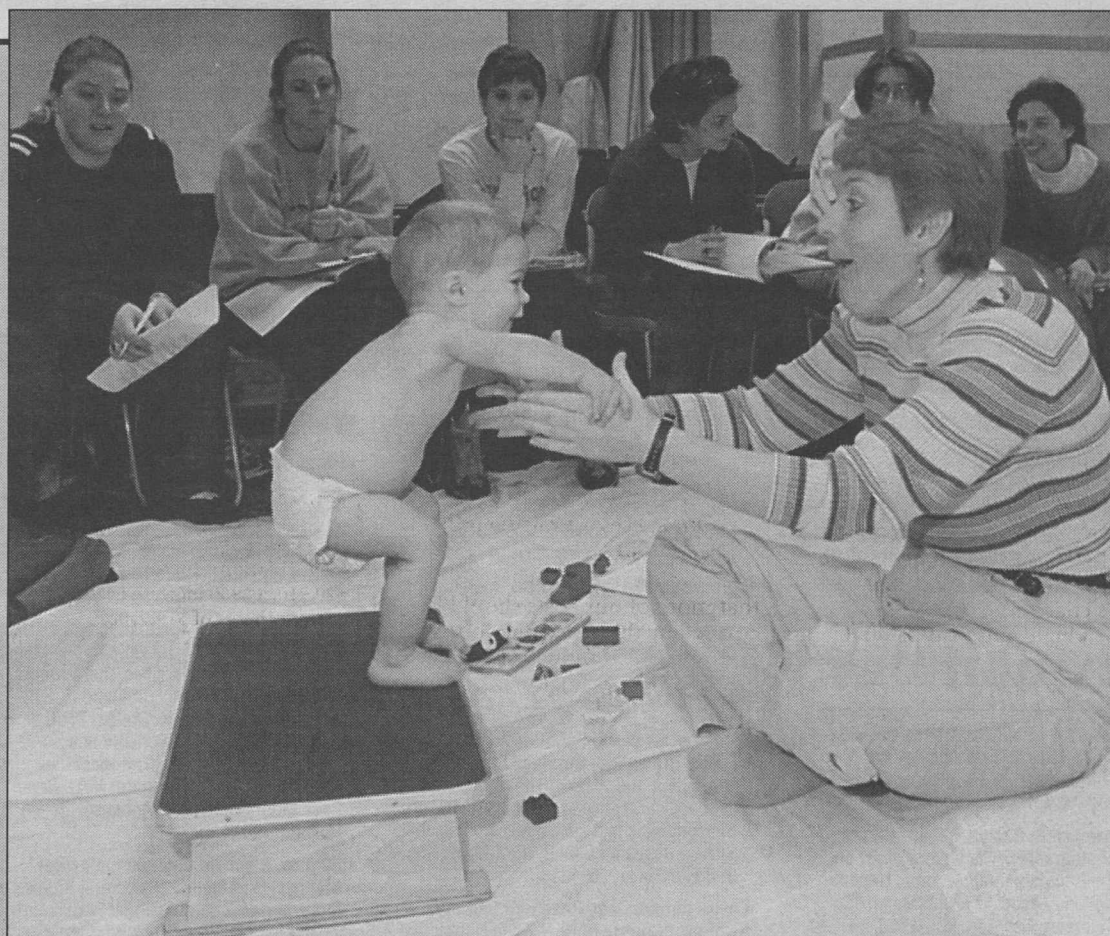
Inserting the pacemaker typically requires an overnight stay in the hospital. Participants return for follow-up after a week,

month and then quarterly for at least a year. During these visits, quality of life and fitness level are assessed.

All participants continue to receive optimal heart-failure therapy throughout the study. All tests, medications and hospitalizations relating to the study are free.

Two additional studies are underway to test the effectiveness of a similar pacemaker in combination with a defibrillator for patients who have a history of cardiac arrest or ventricular tachycardia.

Guidant Corporation and Medtronic, which developed the devices, are sponsoring these studies. For information about the studies or to volunteer, contact Jean Flanagan at 454-7451 or Chris Hinden at 454-7422.



Baby day Nathan Burlis, 19 months, jumps to his mother, Tammy Burlis, P.T., M.H.S., C.C.S., instructor in physical therapy, during a kinesiology class in which professional physical therapy students study the development of movement with the help of babies. Evaluating Nathan's coordination and balance are (from left) physical therapy first-year students Nicole Frank, Kerri Scherer, Erica Herron, Katie Pohl, Danielle Jurjevich and Shelly Blanksteen. This course is part of the entry-level professional program, which, beginning next fall, will be converted to a new doctorate in physical therapy (DPT) program. The new three-year program will prepare students for general practice by blending academic course work with clinical experience in a variety of practice settings. The University has been ranked the No.1 physical therapy school by U.S. News & World Report since it began ranking PT schools. For more information, contact Tracy McMurtry at 286-1402.

Nervous system tumors investigated by Gutmann

BY GILA RECKESS

David H. Gutmann, M.D., Ph.D., associate professor of neurology, genetics and pediatrics, received a four-year, \$1 million grant to study the gene for neurofibromatosis 2 (NF2), an inherited disorder characterized by the development of tumors in the nervous system.

This gene is also implicated in the formation of meningiomas, which originate from the meningeal lining covering the brain and is the second-most-common brain tumor in adults. The research is funded by the National Institute of Neurological Disorders and Stroke.

Because individuals with NF2 develop several varieties of tumors, the responsible gene is thought to be involved in tumor growth. When it does not function properly, nerve cells grow and proliferate.

"If you can hit a tumor when it's young and slow growing, you might be able to eradicate it completely."

DAVID GUTMANN

Gutmann and his colleagues were among the first to demonstrate that NF2 regulates tumor growth, and they identified several proteins that may help NF2 do its job. From these findings, researchers now understand that the NF2 gene plays a critical role in the beginning stages of tumor development. They believe it determines which messages are transmitted to the interior of the cell from the external environment and which are not.

"That's where we'd like to target future therapy," Gutmann

said. "If you can hit a tumor when it's young and slow growing, you might be able to eradicate it completely."

Gutmann believes finding out how the NF2 gene normally prevents cells from piling up on each other might clarify the processes by which cancer cells form and grow. "In a subway car, you stop piling people in when you sense that they are close together," Gutmann said. "Cancer cells lose their ability to sense their nearest neighbors and keep piling more people into the car. The result is a tumor that continues growing no matter how crowded it gets."

Because NF2 is the first gene known to influence the beginning stages of tumor formation, Gutmann hopes his research will open the door to understanding a whole family of proteins involved in tumor development. A clear picture of the initial stages of this process will help researchers develop targeted treatments, he said.

University Events

Gareth Armstrong brings Shakespeare's Shylock to Edison

BY LIAM OTTEN

William Shakespeare's seemingly inexhaustible appreciation for human depth and complexity has given us some of Western literature's most memorable characters. With few sources beyond folktales and historical treatises at his service, the Bard was nevertheless able to recreate the intrigue of a Danish court ("Hamlet"), the dignity of a Moorish general ("Othello") and the splendor of ancient Rome ("Julius Caesar").

Yet in "The Merchant of Venice," we encounter what remains the playwright's most controversial creation: Shylock, the miserly Jew whose infamous, vengeful demands for a "pound of flesh" uncomfortably echo anti-Semitic stereotypes.

For Welsh actor and director Gareth Armstrong, a former member of the Royal Shakespeare Company, that dilemma provides not only an opportunity to examine the playwright and his epoch, but also provides a key to help unlock the question of Jewish representation in art, theater and even history.

In a special one-night-only

"Shylock"

WHO: Gareth Armstrong

WHAT: "Shylock"

WHERE: Edison Theatre, Mallinckrodt Center, 6445 Forsyth Blvd.

WHEN: 8 p.m. Saturday

TICKETS: Tickets are \$25 and are available at Edison Theatre Box Office, 935-6543, or MetroTix, 534-1111.

performance, Armstrong will bring his critically acclaimed monologue "Shylock" to Edison Theatre at 8 p.m. Saturday.

In "Shylock," Armstrong, under the guise of Tubal, the only other Jewish man to appear in "The Merchant of Venice," unveils a kaleidoscope of historical events and personages, both real and imagined, that have shaped our perceptions of fiction's most famous Jew. Using little more than lighting, a few props and occasional music, the actor leaps from character to character, touching on Pontius Pilot, Adolf Hitler, Dracula and the Wandering Jew, among many others. By the end of

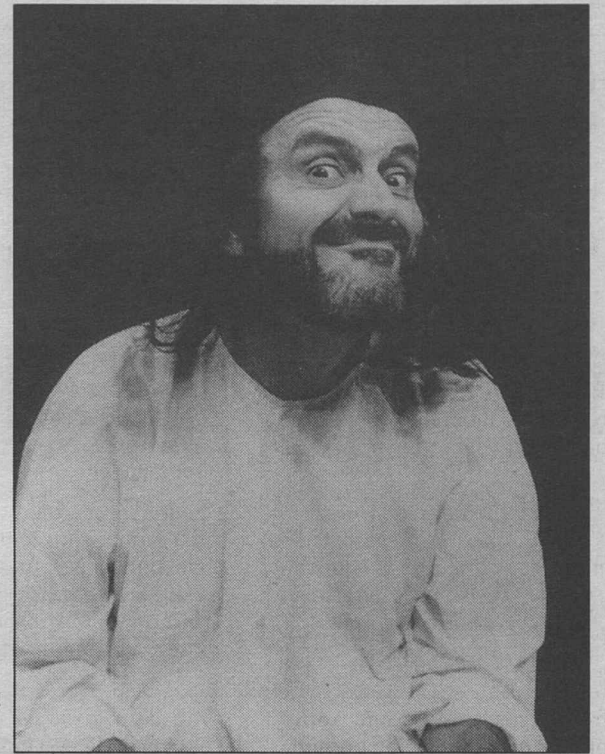
this *tour de force*, Shylock emerges as both perpetrator and victim, his story an affecting homage to the endlessly recurring tragedy of a people, from Biblical times through the Middle Ages and Nazi Germany, right up to modern-day Poland.

Since its 1998 debut, "Shylock" has drawn enthusiastic praise from the British press. "Armstrong is nothing short of incredible," notes The Independent on Sunday. "He presents Shylock's bitterness as a product of persecution, conveyed here with ... innovation, delight and energy." The Scotsman adds that Armstrong "reflects the deepest love and understanding of Shakespeare's genius" and "mixes us adeptly into the problems, pressures, traditions, censors, prejudices and passions of Elizabethan theater."

Armstrong has performed Shakespeare in more than 30 countries – most recently title roles in "Richard III" and "Macbeth," as well as a highly regarded performance as Shylock in the Salisbury Playhouse's "The Merchant of Venice." He has appeared in Agatha Christie's "A Murder Is

Announced," Tom Stoppard's "Dirty Linen" and Noel Coward's "Easy Virtue" in London's West End.

Other roles include Cassius in "Julius Caesar," Oberon in "A Midsummer Night's Dream" and John in David Mamet's "Oleanna." He broadcasts regularly with the BBC and plays the role of Sean in the "The Archers," the world's longest-running radio serial. A founding member of the Made in Wales Stage Company, Armstrong also serves as associate director of ACTER (A Center for Theatre, Education & Research).



Gareth Armstrong's "Shylock" has drawn enthusiastic praise from the British press.

Tickets are \$25 and available at the Edison Theatre box office, 935-6543, or through MetroTix, 534-1111.

Gene Expression • Nematode Embryo • Lost Worlds • Parkinson's Disease

"University Events" lists a portion of the activities taking place at Washington University Jan. 26-Feb. 7. Visit the Web for expanded calendars for the School of Medicine (medschool.wustl.edu/events/) and the Hilltop Campus (cf6000.wustl.edu/calendar/events/).

Exhibitions

"Caught By Politics: Art of the 1930s and 1940s." The Gallery of Art. Through March 18. Steinberg Hall Aud. 935-4523.

"Farewell to Bosnia." Gilles Peress, photographer. The Gallery of Art and the St. Louis Chapter of the United Nations Assoc. Through March 18. Steinberg Hall Aud. 935-4523.

Lectures

Friday, Jan. 26

9:15 a.m. Pediatric Grand Rounds. "Advocatus Diaboli: The Case Against Gene Therapy for Cystic Fibrosis." Thomas W. Ferkol, assoc. prof. of pediatrics, allergy and pulmonary medicine. Clopton Aud., 4950 Children's Place. 454-6006.

Noon. Cell biology and physiology seminar. "Molecular Mechanisms in Endocytosis: A Link to Cell Signaling and Actin Dynamics." Peter S. McPherson, asst. prof., Montreal Neurological Inst., McGill U., Canada. Room 426 McDonnell Medical Sciences Bldg. 362-6950.

4 p.m. Hematology seminar. "Insights Into the Biology of Inositol Signaling." John D. York, Duke U. Medical Center. Room 8841 Clinical Sciences Research Bldg. 362-8801.

Monday, Jan. 29

Noon-1 p.m. Work, Families and Public Policy Brown Bag Seminar Series. "Cognition and Wealth: The Importance of Probabilistic Thinking." Robert Willis, prof. of economics and senior research scientist, Survey Research Center, U. of Mich. Room 300 Eliot Hall. 935-4918.

4 p.m. Immunology Research Seminar Series. "Control of Neutrophil Differentiation and Activation by Granulocyte Colony-stimulation Factor (G-CSF)." Daniel C. Link, asst. prof. of medicine and of pathology. Eric P. Newman Education Center. 362-2763.

Tuesday, Jan. 30

Noon. Molecular Microbiology and Microbial Pathogenesis Seminar Series. "Investigation of Vibrio cholerae Gene Expression During Infection." Andrew Camilli, asst. prof. of molecular biology and microbiology, Tufts U. School of Medicine, Boston. Cori Aud., 4565 McKinley Ave. 286-2891.

Wednesday, Jan. 31

11 a.m. Assembly Series. Chancellor's Fellowship Conference. "Challenges and New Opportunities: African Americans in the New Millennium." Julian Bond, chairman, National Assoc. for the Advancement of Colored People. Graham Chapel. 935-5285.

3 p.m. Law lecture. "Discrimination Against Gays in the Military and On-campus Military Recruitment at Universities That Prohibit Sexual Orientation Discrimination." Sylvia A. Law, the Elizabeth K. Dollard Prof. of Law, Medicine and Psychiatry and co-director, the Arthur Garfield Hays Civil Liberties Memorial Program, NYU. Bryan Cave Moot Courtroom, Anheuser-Busch Hall. 935-6414.

4:30 p.m. Biochemistry and molecular biophysics seminar. "Structural Studies of Ets1 and Pax5: Combinatorial Regulation and Autoinhibition of DNA Binding." Cynthia Wolberger, prof. of biophysics and biophysical chemistry, Johns Hopkins U. School of Medicine, Baltimore. Erlanger Aud., McDonnell Medical Sciences Bldg. 362-0261.

Thursday, Feb. 1

11 a.m. Pulmonary and Critical Care Medicine Grand Rounds. "The Nature of Small Airway Inflammation in COPD." James C. Hogg, prof. of pathology, U. of British Columbia, Vancouver. East Pavilion Aud., Barnes-Jewish Hosp. Bldg. 362-6904.

Noon-1 p.m. Genetics seminar.

"Functional Genomics and Evolution of Development: A View From the Early Nematode Embryo." Fabio Plano, molecular biology dept., Cornell U. Room 823 McDonnell Medical Sciences Bldg. 362-7072.

4 p.m. Chemistry seminar. "Strategies for Synthesis and Structure Determination of Natural Products." Thomas R. Hoye, prof. of chemistry, U. of Minn. Room 311 McMillen Hall (coffee 3:40 p.m., refreshments following Room 561 Louderman Hall). 935-6530.

5 p.m. Art History and Archaeology Lecture Series. "New Jerusalem: Rembrandt, Christians and Jews." Larry Silver, Farquhar Prof. of History of Art, U. of Penn. Room 200 Steinberg Hall. 935-5270.

5 p.m. Vision Science Seminar Series. "Suppression of Tumor Cell Growth Following Intralosomal Injection With TRAIL/Apo2L Recombinant Adenovirus." Thomas S. Griffith, faculty assoc. in urology, U. of Iowa. East Pavilion Aud., Barnes-Jewish Hosp. Bldg. 362-5722.

Friday, Feb. 2

Noon. Cell biology and physiology seminar. "Rab Guanine Nucleotide Exchange Factors: Insights Into Ras-activated Endocytosis." Bruce Horzodovsky, asst. prof. of biochemistry, U. of Texas Southwestern Medical Center. Room 426 McDonnell Medical Sciences Bldg. 362-6950.

6 and 8:30 p.m. Travel Lecture Series. "Lost Worlds of the Middle East." Rick Ray. Sponsored by Washington University Assoc. Cost: \$5. Graham Chapel. 935-5212.

Monday, Feb. 5

Noon. Lung biology conference. "Structure-function analysis of the Stat1 Transcription Factor: Making Epithelial Genes Twitch." Yong Zhang, research assoc. in pulmonary and critical care medicine. Room 801 Clinical Sciences Research Bldg. 362-8983.

Noon-1 p.m. Molecular biology and pharmacology seminar. "Lymphocytes, apoptosis, and caspase inhibitors – a Matter of Life and Death in Sepsis." Richard S. Hotchkiss, assoc. prof. of anesthesiology, of medicine, and of surgery. Room 3907 South Bldg. 362-7056.

Noon. Neuroscience seminar. "Neural Mechanisms of Mammalian Pheromone Recognition." Tim Holy, molecular and cellular biology dept., Harvard U. Room 928 McDonnell Medical Sciences Bldg. 362-7043.

4 p.m. Biology seminar. "The Evolution of Three Biochemical Cycles on Earth: Carbon, Nitrogen and Oxygen." Paul Falkowski, environmental biophysics and molecular ecology program, Inst. of Marine and Coastal Sciences and geology dept., Rutgers U., N.J. Room 322 Rebstock Hall. 935-6862.

4 p.m. Condensed matter/materials and

biological physics seminar. "Creating the Hologram (in Miniature): Computer-generated Holograms With Corporeality." Gabriel Spalding, physics dept., Illinois Wesleyan U., Bloomington. Room 241 Compton Hall (coffee 3:45 p.m.). 935-6276.

4 p.m. Immunology Research Seminar Series. "Regulation of B Lymphocytes by Innate Immunity." Michael C. Carroll, Harvard Medical School, The Center for Blood Research. Eric P. Newman Education Center. 362-2763.

Tuesday, Feb. 6

Noon. Molecular Microbiology and Microbial Pathogenesis Seminar Series. "Attenuation of Influenza Viruses by Altering the Viral Interferon Antagonist." Peter Palese, prof. and chair of microbiology, Mount Sinai School of Medicine, N.Y. Cori Aud., 4565 McKinley Ave. 747-2132.

12:05-12:55 p.m. Program in Physical Therapy research seminar. "Joint Kinematics Alter Sequential Reaching Deficits in People With Parkinson's Disease." Valerie Kelly, doctoral candidate in movement science. Classroom B114, 4444 Forest Park Blvd. 286-1404.

4 p.m. Bioorganic Chemistry Seminar Series. "Mass Spectrometry for Biological Interactions and Reactions." Michael L. Gross, prof. of chemistry. Room 3907 South Bldg. 362-3363.

4 p.m. Chemistry seminar. "New Applications of the Ireland Claisen Rearrangement in Natural Product Synthesis." Matt McIntosh, chemistry dept., U. of Ark. Room 311 McMillen Lab (coffee 3:30 p.m.). 935-6530.

Wednesday, Feb. 7

11 a.m. Assembly Series. Arthur Holly Compton Memorial Lecture. Kip S. Thorne, astrophysicist, The Feynman Prof. of Theoretical Physics, Calif. Inst. of Technology, and co-founder, Laser Interferometer Gravitational Wave Observatory (LIGO) Project. Graham Chapel. 935-5285.

5:15 p.m. Mothers and Babies Research Center Conference. "Mutations of the Zona Pellucida Genes: Insights Into Fertilization." Tracy L. Rankin, post-doctoral fellowship, cellular and developmental biology laboratory, National Inst. of Diabetes and Digestive and Kidney Diseases (NIDDK), NIH, Bethesda, Md. Room 36, third floor south, St. Louis Children's Hosp. 747-0739.

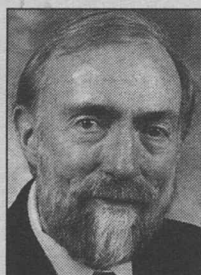
Astrophysicist Kip Thorne to deliver Compton lecture

Astrophysicist Kip S. Thorne will deliver the Arthur Holly Compton Memorial Lecture at 11 a.m. Feb. 7 as part of the University's Assembly Series.

His talk, "Spacetime Warps and the Quantum: A Glimpse of the Future," will be held in Graham Chapel and is free and open to the public.

Thorne's research has helped lay the groundwork for much of the current understanding of black holes, relativistic stars and gravitational waves. He has been on the faculty of the California Institute of Technology since 1970 and currently is The Feynman Professor of Theoretical Physics. In addition, Thorne co-founded the Laser Interferometer Gravitational Wave Observatory (LIGO) Project.

Other contributions to his field include co-authoring the 1973 textbook "Gravitation," from which a generation of scientists have learned general relativity. He



Assembly Series

Who Kip S. Thorne

Where Graham Chapel

When 11 a.m. Feb. 7

Admission Free and open to the public

He was elected to the American Academy of Arts and Sciences in 1972 and the National Academy of Sciences the following year.

has also written "Gravitation Theory and Gravitational Collapse" (1965); "Black Holes: The Membrane Paradigm" (1986); and, most recently, "Black Holes and Time Warps: Einstein's Outrageous Legacy" (1994).

For his published work, Thorne has received a number of writing awards, including the American Institute of Physics Science Writing Awards in Physics and Astronomy (1969 and 1994); Priroda (Russian) Readers Choice Science Writing Award (1989 and 1990); the Phi Beta Kappa Science Writing Award in 1994.

Among Thorne's fellowships are a Woodrow Wilson Fellow, a Danforth Foundation Fellow, a Fulbright Fellow and a Guggenheim Fellow. He has served in an advisory capacity for the United States as a member of the National Academy of Science's Space Science Board and the Committee on U.S.-U.S.S.R. Cooperation in Physics, and as an adviser to NASA and Congress on space science policy.

For more information, call 935-5285 or visit the Assembly Series Web page at <http://wupa.wustl.edu/assembly>.

Music

Sunday, Jan. 28

3 p.m. Faculty recital. "Henry Palkes and Friends." Henry Palkes, pianist, performs music of Schumann, Scriabin, Rachmaninoff and Zabrack. Mary Wilson and Deborah Lennon, sopranos, perform music of Mozart, Weill, Bolcum and Gershwin. Graham Chapel. 935-4841.

Gallery of Art presents lecture series in conjunction with exhibition

By LIAM OTTEN

The University's Gallery of Art and Department of Germanic Languages and Literatures will present a series of lectures in conjunction with the exhibition "Caught by Politics: Art of the 1930s and 1940s," on view at the Gallery until March 18. The series will feature nine

scholars from the University and around the country addressing various forms of cultural exchange between exiled German artists, writers and filmmakers and their American counterparts during that period.

All lectures are free and open to the public and begin at 7 p.m. Thursdays in the Gallery of Art in Steinberg Hall. Talks include:

• **Feb. 8 — Sabine Eckmann**, curator of the University's Gallery of Art, will speak on "Exile Art and National Identities: Current Perspectives."

• **Feb. 15 — Paul Michael Lutzeler**, the University's Rosa May Distinguished University Professor in the Humanities in Arts & Sciences and director of the European Studies Program

and the Max Kade Center for Contemporary German Literatures, will speak on "The City of Man (1940): American and Exiled European Intellectuals Envision A World Democracy."

• **Feb. 22 — Nora Alter**, associate professor of German and film and media studies at the University of Florida, Gainesville, will speak on "Hans Richter in Exile: Translating Avant Garde Film." A screening of Richter's film "Dreams That Money Can Buy" will be held prior to lecture at 5 p.m.

• **March 1 — Gerd Gemünden**, associate professor of German and comparative literature at Dartmouth College, will speak on "Hollywood and the Holocaust: The Case of Ernst Lubitsch."

• **March 8 — Jonathan Petropoulos**, professor of history at Claremont McKenna College, Calif., and research director for art and cultural property on the Presidential Commission for Holocaust Assets in the United States, will speak on "Art Looting and Nazi Art Experts: A Transatlantic Perspective." A reception will follow.

• **March 22 — Lutz Koepnick**, associate professor of German languages and literatures and film and media studies, both in Arts & Sciences at the University, will speak on "Berlin Noir: Robert

Siodmak's Hollywood."

• **March 29 — Martin Jay**, the Sidney Hellman Ehrman Professor of History at the University of California, Berkeley, will speak on "History Versus Memory: Narratives of the Exile Experience."

• **April 5 — Angela Miller**, associate professor of art history and archaeology in Arts & Sciences at the University, will speak on "War Wounds: Body, Psyche, Nation in the Work of Magic Realists and Others."

The series is organized by the University's Gallery of Art and Department of Germanic Languages and Literatures, with support from the DAAD (German Academic Exchange Service), the German General Consulate of Chicago, the American Council on Germany and the St. Louis Holocaust Museum and Learning Center. Additional support comes from the following units of the University: Office of the Dean of the College of Arts & Sciences, Department of Art History & Archaeology, Committee on Comparative Literature, Department of English, European Studies Program and Department of History.

For more information, call 935-4523 or visit www.wustl.edu/GalleryofArt.

Brown-bag lunches address range of topics

By ANN NICHOLSON

Faculty and graduate students with an interest in topics relating to labor, household, health care, law and social welfare are invited to take part in a series of Monday brown-bag luncheon seminars during the spring semester.

Now in its fifth year, the "Work, Families and Public Policy" series features one-hour presentations on current research interests of faculty from across campus and from other universities. The presentations, held in Eliot Hall Room 300, run from noon to 1 p.m. and are followed by a half-hour discussion period.

Robert A. Pollak, Ph.D., the Hernreich Distinguished Professor of Economics in Arts & Sciences and the Olin School of Business, and Michael Sherraden, Ph.D., the Benjamin E. Youngdahl Professor of Social Development and director of the Center for Social Develop-

ment at the George Warren Brown School of Social Work, organize the series. The seminars are:

• **Monday** — Robert Willis, Ph.D., professor of economics at the University of Michigan, on "Cognition and Wealth: The Importance of Probabilistic Thinking";

• **Feb. 12** — Margaret L. Brown, Ph.D., Washington University assistant professor of anthropology in Arts & Sciences, on "Compensating for Mistrust Among Kin";

• **Feb. 26** — Greg J. Duncan, Ph.D., professor of education and social policy at Northwestern University, on "Welfare Reform and Child Well-Being";

• **March 26** — Donna Ginther, Ph.D., Washington University assistant professor of economics in Arts & Sciences and a senior economist at the Federal Reserve Bank of Atlanta, on "Career Attainments of Women in Science";

• **April 9** — Timothy

McBride, Ph.D., associate professor of economics at University of Missouri-St. Louis, on "If We Raise It Will They Come? The Failure of the Medicare+Choice Program"; and

• **April 23** — Irwin Garfinkel, Ph.D., the Mitchell I. Ginsberg Professor of Contemporary Urban Problems at Columbia University, on "Child Support and the New World of Welfare."

The series is sponsored by the schools of business and social work; the Center for Social Development; the Business, Law, and Economics Center; the Department of Economics; the Graduate School of Arts & Sciences; and the Committee on Social Thought and Analysis. The room is provided courtesy of the Murray Weidenbaum Center on the Economy, Government and Public Policy.

For more information, contact Pollak at 935-4918 (pollak@olin.wustl.edu) or Sherraden at 935-6691 (sherrad@gwbmail.wustl.edu).

Arts & Sciences Technology and Curriculum Initiative proposals due

The deadline for proposals from Arts & Sciences faculty to fund projects using technology in their teaching is Wednesday. A \$100,000 fund under the Arts & Sciences Technology and Curriculum Initiative will support projects approved by a reviewing committee.

This is the second year that Edward S. Macias, Ph.D., executive vice chancellor and dean of Arts & Sciences, has made a \$100,000 provision for faculty members to enhance their teaching with technology. Fourteen out of 19 proposals were funded last year, ranging from \$2,000 for a laptop computer to develop a particular course to \$44,000 to upgrade an electronic classroom.

A committee, co-chaired by Dennis J. Martin, associate vice

chancellor and associate dean in Arts & Sciences, and James W. Davis, Ph.D., director of the Teaching Center and professor of political science in Arts & Sciences, will identify projects to support. Finalists will be notified by the end of February.

Additional opportunities to seek support under this program will be announced later in the spring semester, if funding remains after this first round of applications.

Where practicable, proposals should indicate how students' technological fluency will be enhanced by the project. Technological fluency refers to the ability to understand computing and information technology beyond a particular course or a particular skill set. Applications need to address

future funding requirements, whether ongoing educational personnel, equipment costs or long-term technical support. The Arts & Sciences Computing Center can provide Student Technology Assistants (STAs) to assist with funded projects where appropriate. Long-term labor needs can't be funded, and projects requiring this should indicate what resources are available for long-term sustainability. All proposals also need to include a plan to assess and evaluate the project.

Interested faculty should contact Kathy Atnip, director of academic support for Arts & Sciences (kathy@artsci.wustl.edu), Liz Peterson, associate director of the Teaching Center (liz@artsci.wustl.edu), or Dennis Martin (djm@artsci.wustl.edu).

Child neglect to be examined by Jonson-Reid

By ANN NICHOLSON

Melissa Jonson-Reid, Ph.D., assistant professor at the George Warren Brown School of Social Work, has received a three-year, nearly \$700,000, grant from the National Institute of Mental Health, U.S. Department of Education and the National Institute of Justice to study child neglect and the relationships between risk factors, public service use and outcomes.

The "Child Neglect: Cross Sector Services Paths and Outcomes" project is part of a Federal Child Neglect Research Consortium effort to better serve children.

"While numerous studies have focused on services for child abuse, very little research has been done specifically on child neglect — even though about half of the 3 million child-abuse cases reported each year are reported for neglect," said Jonson-Reid, principal investigator on the study.

"What little research has been done suggests that children who are neglected are as at risk of poor outcomes as children who experience other types of maltreatment," she said.

"This initial research combined with the magnitude of the problem of neglect emphasizes the need for additional studies."

The project will use administrative data to track the service paths of 18,000 low-income children, birth to age 18, in the St. Louis metropolitan area. Jonson-Reid will examine patterns between instances of reported neglect and other forms of abuse, use of social services and various end results of what happened to the children between 1993 and 2001.

Immediate consequences of neglect can range from physical injuries such as fractures and severe burns to health problems resulting from improper diet or lack of regular health and dental



Jonson-Reid: Gets three-year grant

care, to educational failure due to parents allowing truancy or failing to obtain appropriate special services, Jonson-Reid said.

In addition to concerns about a child's immediate well-being, neglect can have long-term repercussions affecting a child's intellectual, physical and emotional development. Research is needed to better understand associations between neglect and later problems such as delinquency and substance abuse, and to better determine the potential long-term benefit of social service interventions, Jonson-Reid said.

In the study, administrative data from educational, health, juvenile justice and social service agencies will allow analysis of services used by families and the eventual outcomes. The study will compare service-use data for low-income children

without any instances of reported neglect or abuse with data for those reported for neglect, physical abuse, sexual abuse or more than one type of maltreatment.

Other social work faculty involved in the study include co-investigator Brett Drake, Ph.D., associate professor, and investigators Shirley L. Porterfield, Ph.D., assistant professor, and James Herbert Williams, Ph.D., associate professor and assistant dean for academic affairs. The project's biostatistician is Edward L. Spitznagel, Ph.D., professor of mathematics in Arts & Sciences and professor of biostatistics in the School of Medicine's Division of Biostatistics.

"While numerous studies have focused on services for child abuse, very little research has been done specifically on child neglect — even though about half of the 3 million child-abuse cases reported each year are reported for neglect."

MELISSA JONSON-REID

And more...

Thursday, Feb. 1

8:30 p.m. Holmes Jazz Series. The Black/DeMarinis Quartet concert. Paul DeMarinis on saxophone, Dave Black on guitar, Kevin Gianino on drums and Eric Markowitz on bass. Sponsored by WU College of Arts & Sciences, Dept. of Music in Arts & Sciences, Office of Student Activities and Campus Life. Holmes Lounge, Ridgley Hall. 935-4841.

On stage

Saturday, Jan. 27

8 p.m. OVATIONS! Series. "Shylock." Gareth Armstrong. Cost: \$25. Co-sponsored by the Missouri Arts Council and the Regional Arts Commission. Edison Theatre. 935-6543.

Sports

Friday, Jan. 26

6 p.m. Women's basketball vs. U. of Rochester, N.Y. Athletic Complex. 935-5220.

6 p.m. WU Swimming and Diving Invitational. Millstone Pool. 935-5220.

8 p.m. Men's basketball vs. U. of Rochester, N.Y. Athletic Complex. 935-5220.

Saturday, Jan. 27

11 a.m. WU Swimming and Diving Invitational. Millstone Pool. 935-5220.

Sunday, Jan. 28

1 p.m. Men's basketball vs. Case Western Reserve U., Cleveland. Athletic Complex. 935-5220.

3 p.m. Women's basketball vs. Case Western Reserve U., Cleveland. Athletic Complex. 935-5220.

Worship

Friday, Jan. 26

11:15 a.m. Catholic Mass. Catholic Student Center, 6352 Forsyth Blvd. 935-9191.

1:10 p.m. Muslim Friday prayers. Includes sermon and prayer service. Lambert Lounge, Mallinckrodt Student Center. 935-3543.

Friday, Feb. 2

11:15 a.m. Catholic Mass. Catholic Student Center, 6352 Forsyth Blvd. 935-9191.

1:10 p.m. Muslim Friday prayers. Includes sermon and prayer service. Lambert Lounge, Mallinckrodt Student Center. 935-3543.

Friday, Jan. 26

Noon. Continuing Medical Education course. "Minimally Invasive Surgery in the New Millennium." (Also Jan. 27, 8:30 a.m.) Cost: \$300 physicians, \$150 allied health professionals (includes breakfast and lunch). Eric P. Newman Education Center. 362-6891.

Tuesday, Jan. 30

11:45 a.m.-12:30 p.m. At Wrk Weight Watchers Series. Twelve-week session through April 17. Cost \$126 (two free sessions if you get 20 members to join). Room 241 Simon Hall. 935-6369.

Friday, Feb. 2

8 a.m. Continuing Medical Education seminar. "Review of the 2000 San Antonio Breast Cancer Symposium." Cost: \$95 (includes breakfast and lunch). Sponsored by The Alvin J. Siteman Cancer Center. The Ritz-Carlton Hotel, St. Louis. To register, call 362-6891.

Monday, Feb. 5

6 p.m. University College panel discussion. "How the Internet is Changing Sports Journalism." Five panelists representing ESPN, The Sporting News, sportsjones.com, Sports Illustrated and CBS.Sportsline.com. Michael MacCambridge, moderator and adjunct instructor in University College. Room 162 McDonnell Hall. 935-4320.

Students

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Uzbekistan," said Zinta Gulens-Grava, program manager at OSI. "Our new partnerships with Washington University and Columbia University — where we launched the OSI master's degree fellowship program this fall — will help ensure the development of open societies in these nations."

OSI fellow Andrey Adilov said his homeland of Uzbekistan is in dire need of a developed and independent system of social work.

"A large number of people with disabilities live in poverty and are not supported by any means," said Adilov, who is focusing his studies at the social work school on health, mental health and disabilities.

"With the huge transition that is going on, the government is mainly concerned with political and macroeconomic issues," he said. "Besides, there is a lack of specialists who would be able to organize and develop social work within the framework of the political and economic system of the new independent state. I hope to be able to change that."

OSI fellow Khoumar Housseynova of Azerbaijan said: "We will be pioneers for social work in our countries. I will try to use what I have learned here to help fill the gaps and to make choices that will address the problems back home. With the great facilities, professors, courses and experiences we are getting here, we don't have a right not to succeed."

The OSI fellows each went through a rigorous selection process, said Brian Legate, director of admissions for the social work school.

"In addition to some experience in public service work, all of the fellows have impressive academic and professional credentials, including some who worked as doctors, engineers and teachers," Legate said. "The program is great for the fellows because they will be able to use their training as social workers to bring about change in their home countries. It is also great for us because they add to the diversity of our international M.S.W. students, who this year represent



Brian Legate, left, director of admissions at the George Warren Brown School of Social Work, leads a tour for the school's international Open Society Institute (OSI) Fellows. Zinta Gulens-Grava, second from right, program manager at OSI, helped launch the new program to train the students as their homelands' first social workers.

27 countries and 13.7 percent of our student body."

The fellows said they have been impressed by the fall semester's foundation courses focusing on social work theories, issues and practice methods and on human behavior and the social environment. During the two-year program, they also will conduct research and participate in fieldwork to gain direct professional experience.

OSI fellow Chimeg Tserendorj of Mongolia said she is gaining valuable insights from the M.S.W. program.

"I've been learning how the economic, political and cultural aspects of social work are interrelated," Tserendorj said. "This is especially important to understand in our country where these aspects went through a drastic change."

"As a former United Nations volunteer working in community development programs, I'm also very interested in the international concept of 'service' administration and the concept of rural development where the local people play an important role in developing their community," she added.

The other four OSI fellows similarly will pursue areas of study in which they plan to conduct groundbreaking work in their homelands. Natela Phartskaladze of Georgia will focus on gerontology, Gulnara Ismankulova of Kazakhstan will concentrate on mental health and disabilities, and Fariz Ismailzade of Azerbaijan and Victoria

"I've been learning how the economic, political and cultural aspects of social work are interrelated. This is especially important to understand in our country where these aspects went through a drastic change."

CHIMEG TSERENDORJ

Izmailova of Kyrgyzstan will study social administration.

Shanti K. Khinduka, Ph.D., dean of the social work school, said the new fellowship program furthers the school's goal of supporting social development worldwide.

"It is a tremendous opportunity for us to become involved in the front-line training of individuals in social policy and social work practice for adaptation in countries that are just beginning to establish means of addressing wide-scale social issues," Khinduka said. "The fellows also can share with us their firsthand experiences about the many challenges these emerging democracies face. Such insights will help with our ongoing research into best practices for building within communities the capacity to help themselves long-term."

Zhang

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through these different phone booths that enables the telephone service person to avoid backtracking, one-way streets, or visiting the same booth twice, and gets him back to the office at a reasonable time. In the business world, this saves a company time and money.

Beyond the phone booth problem, the Zhang algorithm and the others were tested on a category called "No-wait flowshop problems." Picture an automobile paint shop with multiple stations for painting different portions of a car. The algorithm maps the most efficient route from start-to-finish.

Zhang and Johnson tested the algorithm on four different classes of flowshop routes, with routes of 100, 316, 1,000, and 3,162 different stations. Compared with six other algorithms tested, the Zhang algorithm found the shortest, most cost-effective route in each case. The algorithm is scalable and robust; it can compute for up to half-million "nodes," in this case stations, and it computed some routes in a matter of seconds.

Also computed were routes for tiny disk-drive readers inside a computer and routes for moving heavy drilling machines on a large oil field. In the case of the disk-drive reader, a short route must be chosen to minimize the distances that the reader must "travel" to speed up data access operations. In the case of the drilling machines, a short route means a short "travel" distance for the equipment. The algorithm also can be applied to what is called very large scale integration (VLSI). For such a problem, a route is needed that will connect all the minuscule components on a computer chip so that they can interface and function together.

Each of the TSPs tested are considered asymmetrical, which takes into account that the distance from place A to place B is not the same as that from B to A. Asymmetrical problems more closely reflect real-world situations. For instance, traveling on a freeway, you might be able to get on and reach a destination without paying a toll, but on the way back you might have to cross a bridge that has a toll. Thus, the cost in one direction is not the same as that going back. The

Zhang algorithm factors in these real-life asymmetries.

The results of the research were presented Jan. 5 at the Third Workshop on Algorithm Engineering and Experiments (Alenex 01), held in Washington, D.C. Some of the results also will be included as a chapter in a forthcoming book on TSP. The work is partially funded by the National Science Foundation.

"The TSP is one of the first computer science problems to be approached in the past century, and it is one of the first problems shown to be in the class called NP-Complete," Zhang said.

Loosely speaking, NP-Complete is a class of problems that are believed unsolvable within a reasonable amount of time in the worst case. Thus, approximation algorithms are very important for solving real-world problems such as the pay phone coin collector puzzle. Zhang's algorithm is considered to be one of the two best approximation algorithms for the Asymmetric Traveling Salesman Problem. The other is called the Kanellakis-Papdimitriou local search algorithm, named after two noted computer scientists.

Algorithms such as Zhang's are memory-efficient and meant to be embedded in hardware as a small but essential part of what's called mechanical electronic manufactured systems (MEMs). Zhang is currently working on algorithms that are meant to run on smart devices, with very small memory and limited power.

"Memory is a big issue today," Zhang said. "With MEMs, you bundle the software so it's very tightly integrated with the hardware and each smart device, with just a few thousand bits of memory and small amounts of data, all connect with each other to build and run a larger application. Running time- and space-efficient algorithms, you build a big system out of these small smart devices."

Zhang is particularly interested in applying his skills in computer science and artificial intelligence to a relatively new but very active area called computational biology, or bioinformatics.

"If we say that information and computer technology were the leaders in the technology world in the last century, then biology will be the leader of this century," Zhang said.

Employment

Use the World Wide Web to obtain complete job descriptions. Go to <https://hr.wustl.edu/> (Hilltop) or <http://medicine.wustl.edu/wumshr> (Medical).

Hilltop Campus

Information regarding positions may be obtained in the Office of Human Resources, Room 130, West Campus. If you are not a WU staff member, call 935-9836. Staff members call 935-5906.

Science/Engineering Librarian 990364
Lab Technician III 000241

Department Secretary 000251
Research Technician 000256

Sr. Research Assistant/Jr. Research Associate 000297

Department Secretary 000323
Research Assistant 000341

Facilities Administrative Coordinator 000351

General Services Assistant 000377
Word Processing Operator 010013

Department Secretary 010016
Retention and Academic Adviser 010017

Research Assistant 010023

Manager, Business Development 010026
Administrative Secretary 010032

Instructional Technology Specialist 010033
Associate Director of Development 010045

Media Adviser 010060
Research Technician 010061

Financial Analyst 010066
Senior Regional Director of Major Gifts 010068

Director of Admissions and Marketing 010069
Department Secretary 010070

MBA Records Assistant 010076
Medical/Research Assistant 010084

Department Secretary 010097
Student Services and Program Coordinator 010100

Associate Director of Research Communications 010107
Senior Medical Sciences Writer 010108

Mechanic (Bargaining Unit Employee) 010111-2

Coordinator-Student Services 010113
Assistant Director Donor Relations for Stewardship 010114

Receptionist/Secretary 010121
Department Secretary 010123

Administrative Coordinator, Non-Degree Executive Education Program 010124
Director of News & Information for Olin School of Business 010126

Appointment Coordinator 010128
Research Assistant/Technician 010129

Deputized Police Officer 010131, 010133
Sales Associate (part time) 010134

Accounting Manager 010137
Administrative Assistant II 010138

Research Assistant 010140
Assistant Laboratory Preparation Specialist 010141

Assistant Dean and Academic Coordinator 010142
Accounts Payable Rep Trainee 010144

Software Engineer Systems Services 010145
Coordinator, Programming and All Campus Events 010146

Student Services Coordinator 010147
Director 010149

Admissions Assistant 010150
Sponsored Project Accountant 010151

Editor, Publications 010153
Financial Aid Coordinator 010155

Assistant Director of Development 010157
Switchboard Operator (part time) 010158

Reference Assistant 010159
Director of Capital Projects 010160

Assistant Director, Alumni & Parents Admission Programs 010164
Catalog Librarian 010166

Student Services Records Processor 010167
NIDA Center Coordinator 010169

Lan Engineer 010171
Deputized Police Officer 010172

Accounting Assistant II 010173

Coordinator, Donor Relations 010174
Administrative Assistant 010175

Assistant Director of Career Services 010176
Administrative Assistant I 010177

Database Manager 010178
Assistant Facility Manager 010179

Manager of Academic and Student Accounting 010180
Technical Associate Programmer 010181

Zone Supervisor 010182
Health Benefits Manager 010183

Director of MBA Student Services 010184
Administrative Assistant 010185

Business and Course Development Manager 010186
Career Development Specialist 010187

Employees: Contact the medical school's Office of Human Resources at 362-7196. External candidates: Submit résumés to the Office of Human Resources, 4480 Clayton Ave., Campus Box 8002, St. Louis, MO 63110, or call 362-7196.

Systems Manager 010267
Research Lab Manager 010403

Statistical Data Analyst 010553
Editorial Assistant 010676

Coordinator: Protocol 010769
Secretary III 010773

Research Technician II 010820
Accounting Assistant 010833

Coordinator: Education 010862
Senior Protocol Coordinator 010877

Payroll Assistant 010981
Secretary II (part time) 011058

Purchasing/Payroll Associate 011114
Secretary III (part time) 011116

Medical Campus
This is a partial list of positions at the School of Medicine.

Stein

— from Page 1

the School of Law, Stein joined the firm of Mark C. Steinberg, a prominent businessman and philanthropist in St. Louis.

In 1941, a stint in the U.S. Army drew him away from Steinberg's firm for six years, but Stein returned after the war and began advising clients such as St. Louis Browns owner Bill Veeck and Sidney Salomon Jr., founder of the St. Louis Blues.

After Steinberg's death in 1951, Stein established his own brokerage firm, continuing work with influential business leaders throughout the country.

In 1986, Stein merged his firm with Stifel Financial Corporation, serving as chairman of the board until 1988, when he became chairman emeritus.

Stein's dedication to St. Louis went beyond the business community; both cultural and charitable institutions felt his influence. He served as chairman of the Jewish Hospital of St. Louis board from 1988-1991. Stein also was an emeritus trustee of the St. Louis Symphony Society, a director of the United Way of Greater St. Louis and a director of the Arts and Education Council of Greater St. Louis.

At the University, Stein served on

the Alumni Board of Governors, the Capital Resources Executive Committee during the Alliance for Washington University and on the Arts & Sciences Task Force. In addition, Stein was a Life Benefactor of the William Greenleaf Eliot Society and helped establish the Elliot H. Stein Family Chair in Neurosurgery at the University and Barnes-Jewish Hospital.

Stein's impact on the community is reflected in his numerous honors. In 1987, the business school named Stein one of the first four recipients of the Olin School's Distinguished Business Alumni Award. The Elliot H. Stein Family Nervous System Injury Unit was established in his honor by a number of St. Louis corporations, friends and admirers to finance Parkinson's disease research.

A memorial service for Stein was held Jan. 19 at Temple Israel in Creve Coeur.

Contributions may be made to the charity of the donor's choice.

Survivors include his wife, Cheryl S. Wroth Stein, a 1979 alumna of the School of Social Work; his sons, Elliot Stein of New York, John and Jim Stein of Los Angeles; a daughter, Jill Stein of Paris; a stepdaughter, Ashley Wroth of Frontenac; a stepson, Trey Wroth of St. Louis; two brothers, William Stein of San Francisco and Leon Stein of Chicago; and two grandchildren.

Notables

Introducing new faculty members

The following are among the new faculty members on the Hilltop Campus. Others will be introduced periodically in this space.

Andrew Martin joins the Department of Political Science in Arts & Sciences as assistant professor. He graduated cum laude with high honors in 1994 from the College of William and Mary and earned a doctorate in 1998 from Washington University. His research interests include American politics and methodology.

Jeremy Gibson-Brown joins the Department of Biology in Arts & Sciences as assistant professor. He earned a bachelor of science in 1986 from Leicester University, Leicester, U.K., in biology and psychology, and a doctorate from the University of London in embryology/developmental cell biology. The work in his laboratory focuses on how the basic genetic tool kit has been "tinkered with" over time to generate the diversity of body forms that we see today. By comparing expression and functions of the same developmental genes in different species, he seeks to unravel the history of the evolution of developmental programs in animals. He has received a number of honors and awards for his work, including a Development Traveling Fellowship from the Company of Biologists, Ltd.; in 1998, a grant-in-aid at Columbia-Presbyterian Cancer Center in 1994-95; and a Population Sciences Fellowship from the Rockefeller Foundation in 1992-94.

Sophia E. Hayes joins the Department of Chemistry in Arts & Sciences as assistant professor. She earned a bachelor's degree from the University of California-Berkeley in 1990 and a doctorate from the University of California-Santa Barbara in 1999. Her research interests include the application of solid-state nuclear magnetic resonance (NMR) to complex problems in materials science and inorganic chemistry. Hayes also works on the development of optically pumped NMR techniques, coupling laser excitation with NMR and optical detection. These techniques will be applied to low-dimensional semiconductor structures such as quantum wells, clusters, and layered composite materials. Her awards include Sandia National Laboratory Graduate Research Fellow, 1993-1998; Postdoctoral Researcher, UC-Berkeley, and Lawrence Livermore Directorate Postdoctoral Fellow, 1998-2000; Executive Vice Chancellor's International Fellowship, Materials Research Lab, 1998; University of California President's Dissertation Year Fellowship for Physical Science, 1997-1998; James D. Kline Fellowship for International Studies, 1996; and DeWolfe Teaching Award, 1995.

Call for nominations: Gloria W. White Distinguished Service Award

Nominations are due Feb. 2 for the Gloria W. White Distinguished Service Award, recognizing a staff member for exceptional effort and contributions resulting in the betterment of the University. This annual honor was named for White, who retired in 1997 as vice chancellor for human resources after 30 years with the University.

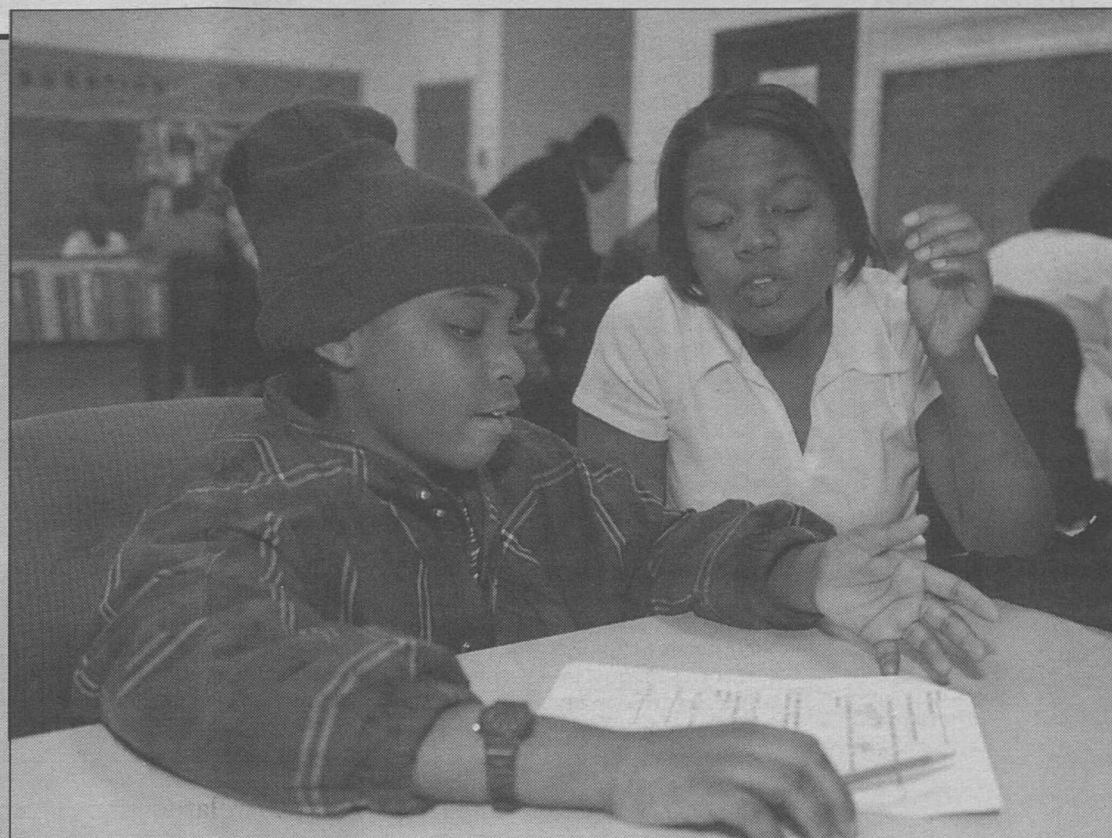
A committee will review the candidates and select an employee to receive the \$1,000 award during the May 21 Staff Day celebration on the Hilltop Campus.

"Our ability to offer superior education, to achieve path-breaking research and to expand and improve the direct services we offer is due in large measure to the dedicated support of our staff," Chancellor Mark S. Wrighton said. "This award provides us an opportunity to publicly recognize our staff members and acknowledge their effort and contribution."

Candidates must have at least five years of employment with the University and be non-academic staff members in good standing. Nominations will be focused on the Hilltop and West Campuses, as the Medical School has the Dean's Award to provide similar recognition to its employees.

Nominations must include the candidate's name, specific reason(s) for the selection, a brief description of how the University has benefited from the candidate's actions and be signed by the person submitting the nomination.

Forms may be accessed on the human resources Web site (<https://hr.wustl.edu>). Under Workplace Support, log in, click on Employee Recognition, and then on the White Award. Call 935-5990 to obtain a paper copy. Send nominations to the Gloria W. White Distinguished Service Award, Campus Box 1184.



Minds at work Celishia Bussey, a freshman in Arts & Sciences, tutors fifth-grader Liz Wright as part of the Each One Teach One program. A collaboration with the St. Louis Public Schools and the Voluntary Interdistrict Choice Corporation, Each One Teach One tutors students from kindergarten through 12th grade who live in the city of St. Louis. Over 80 student tutors from the University participate in the program, held at the Stephens Middle Community Education Center. For more information about the program, e-mail eoto@rescomp.wustl.edu.

Compton and Cori Faculty Achievement awards nominations due

Nominations for the University's annual Arthur Holly Compton Faculty Achievement Award and the Carl and Gerty Cori Faculty Achievement Award are due Feb. 1.

The Faculty Senate Council and Chancellor Mark S. Wrighton established the awards in spring 1998. The Compton Award is given to a member of the Hilltop faculty, and the Cori Award goes to a faculty member from the School of Medicine. Winners will be announced at the Chancellor's Gala on April 21.

An advisory committee, co-chaired by Philip E. Cryer, M.D., professor of internal medicine and chair of the Faculty Senate Council, and Gerhild S. Williams, the Barbara Schaps Thomas and

David M. Thomas Professor in the Humanities and associate vice chancellor for academic affairs, will review nominations and make recommendations to the chancellor.

The committee will consider nominations on the basis of:

- Outstanding achievement in research and scholarship;
- Recognized prominence within the community of scholars;
- Service and dedication to the betterment of the University; and
- Respected accomplishments in teaching.

Any full-time, active faculty

member at the University is eligible for this honor. Award recipients must be nominated by their colleagues. Candidate names may be submitted by any full-time, active faculty member and should consist of a letter detailing the rationale for the award and the nominee's curriculum vitae. Three supporting letters from individuals acquainted with the candidate's contributions as a faculty member also should be submitted.

Nominations and supporting letters should be sent to: Gerhild S. Williams, Administrative Offices, Campus Box 1080.

Campus Authors

Phillip Freeman, assistant professor in the Classics Department in Arts & Sciences

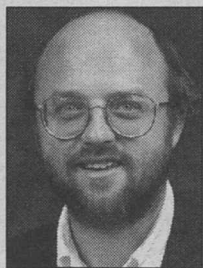
Ireland and the Classical World

(University of Texas Press, December 2000)

"On the boundary of what the ancient Greeks and Romans considered the habitable world, Ireland was a land of myth and mystery in classical times. Classical authors frequently portrayed its people as savages — even as cannibals and devotees of incest — and evinced occasional uncertainty as to the island's shape, size, and actual location. Unlike neighboring Britain, Ireland never knew Roman occupation, yet literary and archaeological evidence prove that Ireland was more than simply terra incognita in classical antiquity.

"In this book, Freeman explores the relations between ancient Ireland and the classical world through a comprehensive survey of all Greek and Latin literary sources that mention Ireland.

He analyzes passages (given in both the original language and English) from over thirty authors, including Julius Caesar, Strabo, Tacitus, Ptolemy and St. Jerome. To amplify the literary sources, he also briefly reviews the archaeological and linguistic evidence for contact between Ireland and the Mediterranean world.



"Freeman's analysis of all these sources reveals that Ireland was known to the Greeks and Romans for hundreds of years and that Mediterranean goods and even travelers found their way to Ireland, while the Irish at least occasionally visited, traded, and raided in Roman lands. Everyone interested in ancient Irish history or Classics, whether scholar or enthusiast, will learn much from this pioneering book."

(Excerpted from the jacket cover)

Obituaries

Susan Sullivan, former assistant dean

Susan Adora Moxon Sullivan, Ph.D., former assistant dean at the School of Law, died of ovarian cancer Jan. 10, 2001, at North Memorial Hospice in Minneapolis, Minn. She was 51.

Sullivan was the wife of E. Thomas Sullivan, J.D., formerly a professor of law and associate dean here and now dean of the University of Minnesota Law School.

Susan Sullivan served in the School of Law from 1983-89 as assistant dean for placement and then assistant dean for external affairs. "Susan was an extraordinary friend and professional, a person who was respected and admired by her peers in career services throughout the country, by her colleagues at the law school, and most of all by the people she really served — the students," said David M. Becker, J.D., law school associate dean for external relations and the Joseph H. Zumbalen Professor of Law and of Property.

Sullivan was recognized nationally as a leader in legal career counseling, recruitment and job satisfaction. From 1987-88, she served as president of the National Association for Law Placement, a nonprofit organization of the 175 accredited law schools and more than 1,000 legal employers throughout the United States.

She previously served as director of the Career Planning and Placement Center at Georgetown University Law Center.

Her doctoral dissertation and research at the University of Missouri-Columbia focused on the psychology of job satisfaction. She previously earned a master of education degree from the University of Miami and a bachelor's degree from Drake University.

Sullivan was diagnosed with ovarian cancer in April 1996. Since then, she devoted her energy and support to other cancer patients and their families, including volunteer work with the Life Enhancement Support Group at Fairview-University Hospital in Minneapolis.

Among her survivors are her husband of 29 years, E. Thomas Sullivan, of Minneapolis; her mother, Margaret Moxon, of Huron, S.D.; brother Keith, and sister-in-law Soona, of Seattle.

A Celebration of Life and Friendships service will be held Saturday at the University of Minnesota. Contributions to further ovarian cancer research may be made to the Women's Health Fund (Sparboe Endowed Chair) at the Minnesota Medical Foundation, Box 395, 420 Delaware St. SE, Minneapolis, MN 55455.

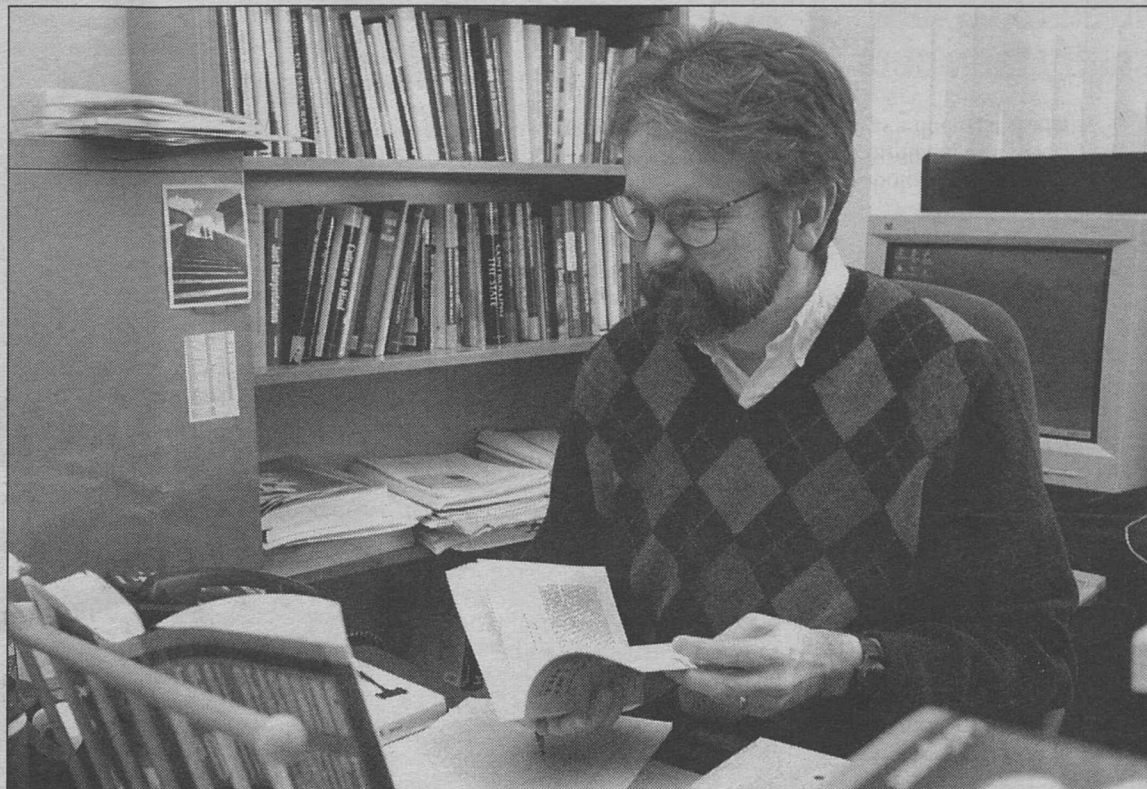
Washington People

In the broad marketplace of ideas, it's not unusual to find sharp differences of opinion on the merits of cultural, racial, gender and religious diversity. Even college campuses have been torn by emotional battles over politically correct speech, race-based admissions and gender pay equity for professors.

Although he has spent much of his academic career building a case for the benefits of diversity, Jack C. Knight, Ph.D., chair and professor of political science in Arts & Sciences, would be among the last to stifle those who speak out against it.

Indeed, it is diversity's contributions to the marketplace of ideas that provide the intellectual cornerstone for many of Knight's theories on how and why humans interact in so many strange and fascinating ways.

Diversity, he contends, has long played a critical role in shaping our most basic societal institutions — the laws, norms, conventions, customs, rules and expecta-



Jack C. Knight, Ph.D., is the University's Sydney W. Souers Professor of Government in Arts & Sciences.

Embracing diversity's challenges

Jack C. Knight, Ph.D., examines how differences among us shape society's basic institutions

BY GERRY EVERDING

tions that hold society together and provide its very fabric. Diverse, competing interests, he argues, provide an important catalyst for institutional change and development. An institution is more likely to evolve in a socially beneficial direction, to be viewed as effective and fair, he adds, when everyone has a free and equal say in determining its structure and operation.

"My work on institutions and diversity has been informed by my philosophical commitment to pragmatism," said Knight, the Sydney W. Souers Professor of Government in Arts & Sciences. "Pragmatism dictates that we be prepared to challenge our own settled beliefs and create an environment in which our beliefs are tested in the face of alternative arguments.

"We do so not only to leave open the possibility that our beliefs are wrong, but also for the possibility that our beliefs will be reinforced through consideration of other reasonable challenges."

Knight has earned a reputation for insightful research, clear writing and innovative teaching on an amazing range of topics related to the evolution and functioning of institutions.

With broad interests in the areas of modern social and political theory, political economy, law and jurisprudence, institutions and organizations, and the philosophy of social science, he is a longtime member of the University's Center in Political Economy and its Committee on Social Thought and Analysis in Arts & Sciences.

More recently, he has worked closely with campus committees developing a new curriculum for Arts & Sciences, and with the Center for the New Institutional

Social Sciences, a research initiative launched by Douglass C. North, Ph.D., the Spencer T. Olin Professor in Arts & Sciences and co-recipient of the 1993 Nobel Memorial Prize in Economic Sciences.

"Knight and I have done a number of articles together, most recently a piece on cognitive science in the social sciences and why an understanding of how the mind works is crucial to a lot of work in political social theory," North said. "His work and mine on institutions have run on parallel tracks, but for a long time we seemed to be at odds on our view of the forces that spur the development of institutions. Eventually, after working together on a couple of editing projects, we began to realize that we're much closer in our beliefs than we might previously have admitted."

Knight's interest in institutions extends from the workings of formal, highly structured systems, such as those for deciding elections, selecting judges and settling labor disputes, to the highly informal, such as social norms guiding relations with family and friends. His research also explores the even more complex interactions of systems that hinge on both formal and informal rules, such as those governing property rights, inheritance, dowry and brideswealth, even weights and measures. He has applied his pragmatic theories to concepts as abstract as trust, and to issues as concrete as lobster management.

"Almost all of my research has in one way or another attempted to understand the answers to two questions," Knight said. "How does the diversity in a society affect the ways in which we create and maintain institutions? And, what does this diversity imply for how we should create and maintain such institutions?"

In Knight's view, diversity's chief attribute is the creative tension it brings to the complex equations of human interaction. As people of different cultures, histories and interests come together, they bring with them diverse ideas, beliefs and values. Institutions — the rules that structure our social, political and economic life — evolve as a function of our desire to achieve the benefits of social cooperation. A diversity of interests and beliefs, he asserts, helps society guard against complacency by forcing it to constantly re-examine its rules

and norms, to remain ever vigilant for more effective social systems.

His most recent book, co-authored with Lee Epstein, Ph.D., professor of law and the Edward Mallinckrodt Distinguished University Professor of Political Science in Arts & Sciences, has earned rave reviews from scholars in several disciplines. Titled "The Choices Justices Make" and published in 1997 by the CQ Press, the book won the American Political Science Association's prestigious C. Herman Pritchett Award for the year's best book on law and courts. Already considered required reading in college courses across the nation, the book is credited with helping spur a sea change in the way scholars are approaching research in judicial politics.

Based on information collected from public records and the judicial papers of Justices Brennan, Douglas, Marshall and Powell, the book offers a compelling new paradigm for understanding how decisions get made on the U.S. Supreme Court. The book also is likely to figure prominently in ongoing scholarly debates over what may have been the Supreme Court's most controversial decision, its recent ruling in the Florida presidential election vote counting debacle.

According to Knight and Epstein, the high court's justices are far from immune to public pressures. Rather, each justice strategically weighs his or her decisions based on their individual assessments of how fellow justices are likely to vote, on how important outside players, such as Congress, might respond, and on the long-term impact of their decisions on the Supreme Court's power, prestige and influence, including its standing in the public eye.

"While the court goes to great length to clothe its decisions in legal precedent, the law of the land as generated by the Supreme Court is actually the long-term product of a series of short-term strategic decisions by individual justices," Knight said. "If justices wish to obtain their goal — typically, to establish policy for the nation — they cannot ignore the preferences and likely responses of those who can overturn their decisions (members of Congress, the president), refuse to respect them (the public), or stand in their way of generating policy in the first

place (their colleagues)."

Although Knight's theories are having considerable impact on legal scholarship, law has never been a clearly defined career path for him. He started out torn between English literature and religious studies, earning a double-major bachelor's degree in those areas from the University of North Carolina at Chapel Hill in 1974.

"I was active in politics during my college days, but I never took a course in political science," Knight said. "I always thought of politics as something you did, not something you studied."

Knight stayed at Chapel Hill to pursue graduate studies. He earned a juris doctoris degree in 1977 and then earned admission to the doctoral program at the University of Chicago, enrolling in political science. He earned a master's degree in 1980 and a doctoral degree in 1989. He was an instructor for several years at the University of Chicago and the University of Michigan before joining Washington University as an assistant professor in 1988.

In addition to his teaching duties, he has served here as an associate chair and director of graduate studies for the Department of Political Science.

Knight is widely published in leading social science journals and a number of important scholarly edited volumes. His other books include "Institutions and Social Conflict," published in 1992 by Cambridge University Press, and "Explaining Social Institutions," a 1995 volume co-edited with Itai Sened, Ph.D., associate professor of political science in Arts & Sciences. He currently serves on the editorial boards of *Rationality and Society* and the *American Journal of Political Science*.

Now in his 12th year at the University, Knight finds himself in the somewhat unusual situation of putting down fairly solid roots. As the son of a phone company executive whose job forced him to relocate often, Knight grew up changing schools and cities on an almost annual basis. His ties to the campus strengthened recently when his wife, Margaret L. Brown, Ph.D., was hired as an assistant professor of anthropology in Arts & Sciences.

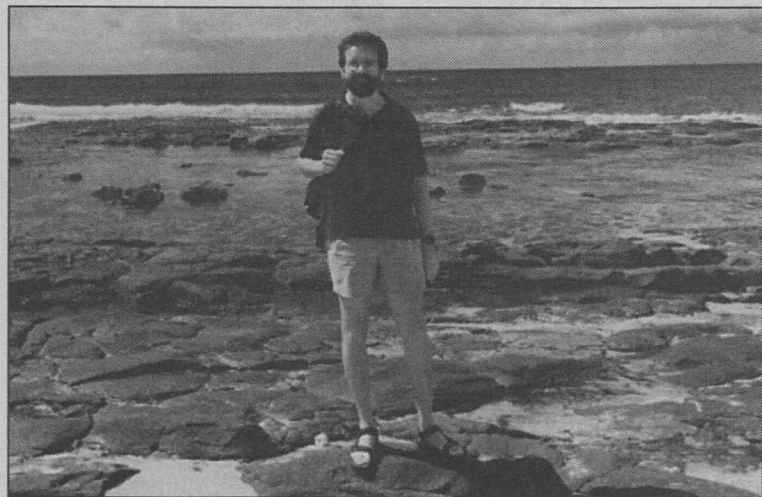
The couple met in 1992 when Brown was a doctoral student here; they married two years later, just before Brown left the United States for two years of field work in Madagascar. Knight has accompanied Brown on some of her anthropological field excursions, including two full summers in Madagascar. But for the foreseeable future, they plan to make their home at Washington University in St. Louis.

Jack C. Knight, Ph.D.,

Education: University of Chicago, Ph.D. 1989, M.A. 1980; University of North Carolina, Chapel Hill, J.D., 1977, B.A. 1974.

Areas of interest: Modern social and political theory; law and jurisprudence; institutions and organizations; political economy/formal theory; philosophy of social science.

Family: Wife, Margaret L. Brown, Ph.D., assistant professor of anthropology in Arts & Sciences.



Jack Knight on one of his trips to Madagascar.