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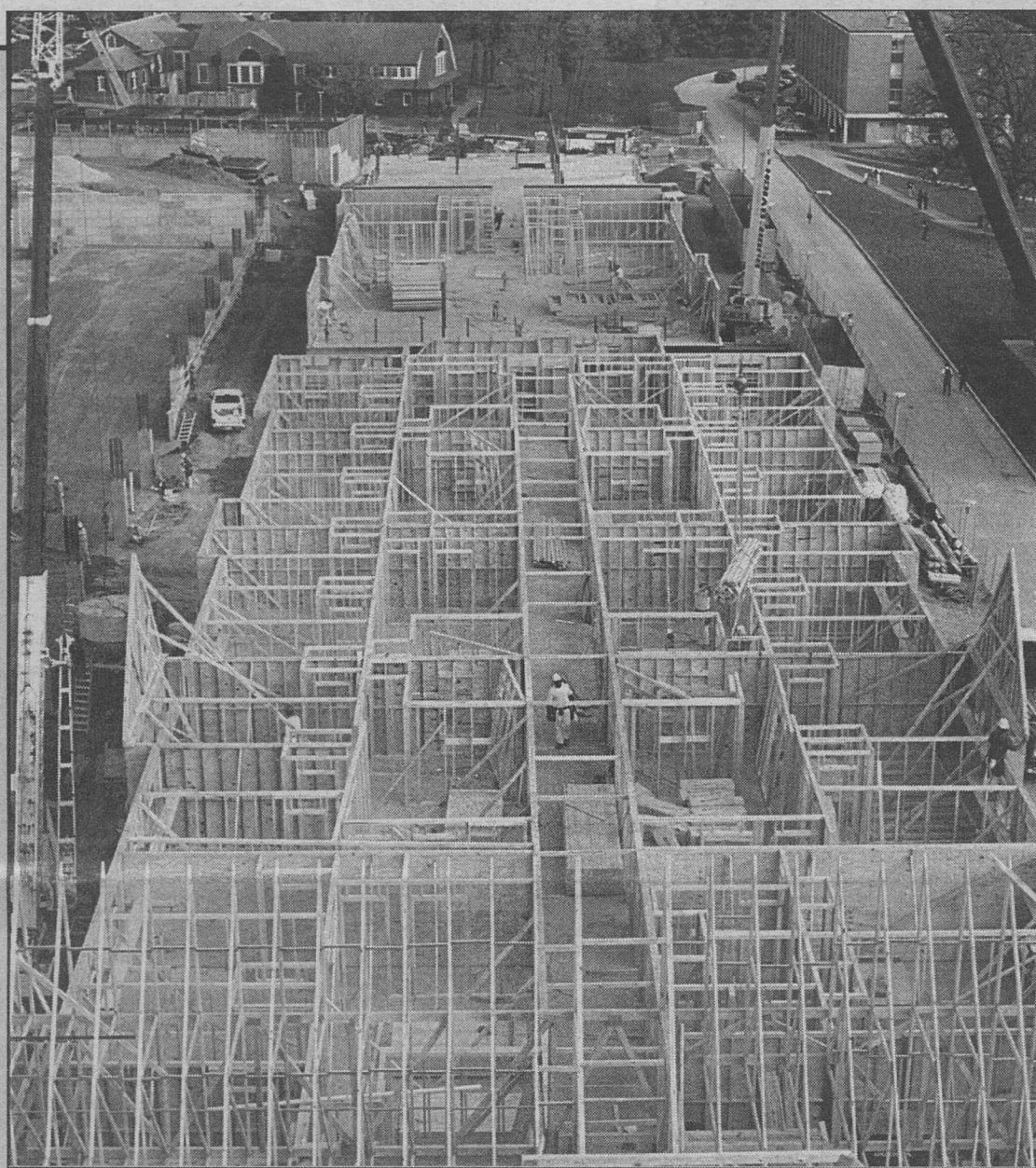
Dec. 10, 1998

Record

15
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Washington University in St. Louis



On the rise McCarthy Construction employees work on the top level of the new residential house just east of Eliot Residence Hall as the outline of the roof takes shape. Alumni House is at top left and Shepley Drive on right. Thanks to good weather, construction is on schedule to complete four new residential houses and a parking garage (at left) on the South 40 in July 1999. Two other buildings are being framed, and concrete for the parking garage also has been poured. "You can see it changing by the day," said Steve Rackers, manager of capital projects and records.

Arvidson installed as McDonnell Professor

By TONY FITZPATRICK

Raymond E. Arvidson, Ph.D., professor and chair of the Department of Earth and Planetary Sciences in Arts and Sciences, was installed as James S. McDonnell Distinguished University Professor Nov. 30 at a ceremony in Holmes Lounge.

Chancellor Mark S. Wrighton praised Arvidson for his outstanding teaching and research and his success in building one of the most distinguished departments of earth and planetary sciences in the nation.

"Our Department of Earth and Planetary Sciences today is recognized as one of the best anywhere, thanks in large part to Ray Arvidson's work and dedication from the moment he arrived here in 1974 to today," Wrighton said. "His research in space sciences closely reflects the vision of James S. McDonnell, who anticipated some of the achievements that Ray has been involved with in his career. As an educator, Ray has inspired and trained students for a

quarter of a century through his innovative methods and his enthusiastic commitment."

James S. McDonnell (1899-1980), was an aviation pioneer and the visionary founder of McDonnell Aircraft Corp. He gave generous support to the University, first establishing a professorship in space sciences in 1964 and

"Our Department of Earth and Planetary Sciences today is recognized as one of the best anywhere, thanks in large part to Ray Arvidson's work and dedication from the moment he arrived here in 1974 to today."

MARK S. WRIGHTON

then the McDonnell Center for the Space Sciences in Arts and Sciences in 1975. He made many additional contributions, particularly in the field of genetics and studies of the human mind and brain. His sons, James S. III and John E., continue a program of directed philanthropy that reflects the James S. McDonnell legacy through the charitable foundation he established.

Funds for the McDonnell professorship came from a recent contribution of \$6.5 million from JSM Charitable Trust, of which \$6 million has been designated for the endowment of three distinguished professorships. Arvidson is the second faculty member to be named a James S. McDonnell Distinguished University Professor; Henry L. Roediger III, Ph.D., chair of the Department of Psychology in Arts and Sciences, was the first.

"Ray Arvidson is a respected scholar, an excellent teacher and an outstanding University citizen," said Edward S. Macias, Ph.D., executive vice chancellor and dean of Arts and Sciences. "He

has done extraordinary work throughout Arts and Sciences and in his department and is a great leader both in our University and in the field of earth and planetary sciences."

Arvidson also will be awarded the Governor's Award for Excellence in Teaching Thursday, Dec. 10, at a ceremony at the Capitol Plaza Hotel in Jefferson

See Arvidson, page 2

Fighting diabetes

American Indians visit campus, tailor program to tribal needs

An innovative community-based diabetes prevention program developed here, which has demonstrated its effectiveness among inner-city African Americans, is now being modified by American Indians for use on a remote southern Arizona reservation with one of the world's highest diabetes rates.

Studies have shown that the rate of non-insulin dependent diabetes mellitus (NIDDM) among Indians of the Tohono O'odham Nation is six times higher than in the general population of the United States. The reservation has the highest mortality rate from the disease of any area served by the Indian Health Service, 40 percent of tribe members over 35 have diabetes, and as many as 10 percent of the tribe's members have had lower extremities amputated because of complications from the disease.

Five Tohono O'odham women came to campus in November as part of a pilot demonstration project that will recruit and train members of the tribal community to develop their own program to prevent diabetes. The tribal council unanimously approved the program, which stresses education about exercise and better nutrition.

Wendy Auslander, Ph.D., associate professor of social work

and a longtime diabetes prevention researcher, is the principal investigator for the project. She has worked closely with Eddie Brown, director of the George Warren Brown School of Social Work's Kathryn M. Buder Center for American Indian Studies, to develop liaisons with the Tohono O'odham community. The project is funded by a grant from the National Institutes of Health to the Diabetes and Research Training Center at the School of Medicine.

Part of the problem in developing a prevention program for the Tohono O'odham, said Auslander, is that the 10,000 members of the tribe living on its four reservation areas are scattered over nearly 3 million acres of desert and mountains. In addition, more than 60 percent of the reservation's residents live below the poverty level and 23.4 percent of them are unemployed.

"We saw a need to educate our people about diabetes," said Shirley Manuel, a representative of the Hickman District of the Tohono O'odham reservation, which is located south of Phoenix and west of Tucson. "We need to fight this diabetes. I don't want my people to give up to this disease."

As with the African-

See Diabetes, page 6

Learning in cyberspace

Teaching Center offers Web workshop

By DAVID MOESSNER

Google. NewHoo. Dogpile." The gurgling jabber of your just-turned-2 niece? Hardly. Rather, the whimsical labels are a sampling of one of the most powerful teaching tools available at one's fingertips — Internet search engines.

That nugget was just one among a gold mine of information recently offered at "The Web as a Teaching Tool" — a series of three hands-on workshops co-sponsored by the Teaching Center, Arts and Sciences Computing and the Libraries.

The 90-minute workshops, which took place in an impressively stocked Eads Hall classroom featuring 20 computer workstations, were aimed at faculty members who would like to make use of the World Wide Web in course development and classroom teaching.

In the first two sessions, members of the group — which was restricted to 10 to approximate an edifying 1:3 teacher-to-student ratio — each planned and then successfully placed their own course page on the Web. The third session featured a guided tour on ways to incorporate Web resources into teaching.

The workshops grew out of a similar opportunity that has been presented to graduate students for the past two years. "As faculty found out about it, they were saying in effect, 'Me, too!'" said James W. Davis, Ph.D., director of the Teaching Center and professor of political science in Arts and Sciences.

Another impetus: the acknowledgment that the technological future, indeed, is now. "It was natural hundreds of years ago that the book become an integral part of the university," Davis said. "The book was a technology. And the library often became the hub, the core. Increasingly, electronic technology is having that effect."

The first step in teaching beginning Web slingers is to lessen the fear factor, according to Kathy Atnip, associate director of faculty and academic services in Arts and Sciences. "One of the fallouts from having so many very slick and highly colorful and interactive Web pages available to view is that it's a little intimidating to someone who hasn't produced something before," said Atnip. "But really, the flash and the movement and the color is just another layer on top of what is basically some text."

In the same way you might

See Websites, page 6



Raymond E. Arvidson, Ph.D., (center) chair of the Department of Earth and Planetary Sciences in Arts and Sciences, visits with James S. McDonnell III (left) and John F. McDonnell after his installation as James S. McDonnell Distinguished University Professor Nov. 30 in Holmes Lounge.

Arvidson

McDonnell Distinguished University Professor

— from page 1

City, Mo. Awardees were selected for their effective teaching and advising, service to their institutions, commitment to high standards of excellence and success in nurturing student achievement.

Arvidson joined the earth and planetary sciences department in 1974 after receiving a doctorate in geology from Brown University that year. He earned a bachelor's degree in 1969 from Temple University and a master's degree in 1971 from Brown University, both also in geology. In 1984 he was made full professor and in 1991 was appointed department chair. He also is a fellow of the

McDonnell Center for the Space Sciences here.

Arvidson is deeply involved in research. He was the team leader of the Viking Lander Imaging Team from 1970 to 1982 and a member of the science team for the Magellan Mission to Venus from 1989 to 1994.

Arvidson is an interdisciplinary scientist on the Mars Global Surveyor, head of NASA's Planetary Data System Geosciences Node, a director of NASA's Regional Planetary Image Center and a deputy investigator of the Athena Mars Rover for the 2001 mission. He is deputy principal investigator for imaging and spectroscopy experiments on the 2001 Mars lander and rover and the Athena payload for the 2003 Mars rover, and he is in charge of science operations for landers and rovers in both operations. He has more than 100 publications dealing with remote sensing of Earth, Mars and Venus.

Arvidson works extensively to connect earth and planetary sciences to other departments in Arts and Sciences. He has played a leadership role in the development of the Environmental Studies Program and the Division of Natural Sciences and Mathematics. He works with graduate students on many projects and is an enthusiastic teacher of undergraduates, particularly in the Hewlett Program in Environmental Studies, a two-year program that offers an innovative, problem-based approach to learning. It reaches across traditional disciplines, incorporating small discussion classes, collaborative projects, lectures, field trips and cultural and social activities. Arvidson and two faculty colleagues lead the course, which last year included a field trip to the Mojave Desert, where students evaluated environmental degradation of the desert and the formation of the new Mojave National Preserve.

Advanced software going to world market

Industries have keen interest in technology developed here

By TONY FITZPATRICK

The Center for Technology Management at Washington University has announced an agreement with Object Computing Inc. (OCI) of St. Louis to commercialize advanced Internet software developed by the University's Distributed Object Computing group, making it available to industries worldwide.

The technology involved is software known as "middleware" and was developed by researchers under the direction of Douglas Schmidt, Ph.D., associate professor of computer science. In transferring the technology, the University leverages OCI's marketing, training and consulting infrastructure to increase the software's adoption for broader industry use.

Middleware occupies a layer between client and server applications where it provides complex high-speed and predictable request processing. The name of the Washington University product is the ACE ORB. ORB is an acronym for Object Request Broker, a primary element in distributed software systems.

In the world of connected systems, it is very common for client applications to request a service without knowing where, or how, that service will be rendered by software on a server. The ORB keeps track of all the services and ensures that any request can be brokered to a server.

The ACE ORB is a second-generation product the development of which has been sponsored by companies from aerospace, telecommunications and medical imaging industries, including Boeing Corp., Lucent Technologies and Siemens.

"Even though this technology is already performing well and at many sites around the world, we have not yet exhausted our ideas for enhancements," Schmidt said. "This is a technology with many years of life ahead of it. We need a partner like OCI so that we can focus on the research and development side, knowing that our sponsors can get the service they are used to with commercial software."

Andrew Neighbour, Ph.D., associate vice chancellor for technology management, sees commercialization of the University technology as a boon to the Midwest.

"We want to help grow the technology base of the Midwest,"

he said, "and linking with strong technology companies like OCI enables us to do just that."

Ebrahim Moshiri, Ph.D., OCI president, also is pleased with the agreement. "We have been associated with Washington University for a long time and have been working with Professor Schmidt's team closely," he said. "This is a tremendous opportunity for both of us to benefit. We have had inquiries about our providing engineering support for this technology from Korea and Germany as well as here in the States. This is just the tip of the iceberg. This is very powerful technology."

The licensing model for the ACE ORB is based on a novel concept called "Open Source." It has no license fees and allows users to freely copy it from Schmidt's website onto all their systems. It also includes the source code, which provides

information about how the software is designed and implemented. Conventional commercial software hides all this information. But in the "Open Source" model, sophisticated users can inspect the code and suggest

improvements, making the product more versatile and robust.

"Open Source attracts exactly the kind of users who can add significantly to the quality of the product," Schmidt said. "Software that is embedded in systems and must be ubiquitous in order to be useful lends itself to this model. Commercial support from OCI increases our software's appeal to prospective users who also want access to the kind of comprehensive support, training classes, extensive documentation and consulting that have been traditionally associated with proprietary products. This agreement allowing OCI to provide commercial support gives our users the best of both worlds."

Object Computing Inc. is a privately held software engineering company, founded in 1993, with a commitment to object-oriented technology. Today OCI provides software systems consulting, product development and educational services to corporations across the United States in the aerospace, finance, health care and telecommunications market segments. Its corporate headquarters are in St. Louis. The St. Louis-based OCI Education Center has one of the most extensive object technology and Java training curricula in the Midwest.

News Briefs

Success!

This fall's United Way campaign at Washington University has come to a successful conclusion, reaching a total of \$388,500 in gifts and pledges, well above the \$375,000 goal. Ann Prenatt, director of employee relations and employee campaign chair, announced the results Dec. 3. Prenatt attributed the success to the hard work of campaign co-chairs Karen Seifert and Paul Anderson at the School of Medicine, Jeannine Bogacki and Jeff Cooper on West Campus, and Blanche Johnson, Prenatt's Hilltop Campus co-chair. Prenatt made special note of the creativity of workers across campus, who came up with many imaginative ways to encourage participation, and the generosity of University employees who responded to the appeal.

Happy holidays!

The Record takes a holiday after this issue through the University's winter break, resuming publication Jan. 14. Record staff wish all our readers the best of the season — good times, good celebrations and good rest. We'll see you in the new year!

Weather watch

In the event that severe weather conditions cause the University to alter the normal work and/or class schedules, a number of media outlets will air the announcement. This announcement will provide

information separate and specific to the plans for the School of Medicine and the balance of the University and will apply only to Washington University students, faculty and staff.

The University community can watch KSDK-TV Channel 5, KMOV-TV Channel 4, KTVI-TV Channel 2 or KDNL-TV Channel 30, or tune into KMOX-AM (1120), MIX 97.1/KXOK-FM or WSIE-FM (88.7).

The radio station 550 KTRS-AM has an off-air telephone snow closing system. To access it, dial 550-KTRS (5877). You will be prompted to enter Washington University's ID number, which is 1439. If there is a closing or cancellation, it will be announced a few seconds after you enter the ID number.

Techno-teaching

More professors than ever are using e-mail and the World Wide Web in their courses, according to a New York Times report of an annual study of technology in higher education. The 1998 Campus Computing Project survey polled technology officials at two- and four-year institutions across the country. Respondents estimated that 44 percent of courses on their campus use e-mail, compared with 32.8 percent last year and just 8 percent four years ago. The survey also found that 23 percent of college courses post class materials on the web, compared to less than five percent four years ago. About 16 percent of courses use computers for in-



Campus quiz: Where would one find this gentle angel?

class simulations or exercises, and 15 percent use CD-ROMs.

Did you know?

The Women's Resource Center Library offers more than 1,000 books on women's issues and related topics, along with periodicals and pamphlets. The center is located in Room 263 Umrath Hall, off Bowles Plaza. Its hours are 10 a.m.-4 p.m. Monday through Friday.

Answer: This benign creature watches over passersby in Brookings Quadrangle from Ridgley Hall.

"News Briefs" includes short items on a wide range of subjects, typically information about resources, benefits and opportunities available to faculty and staff. Readers are invited to submit briefs, which will be used as space permits, to Betsy Rogers, Campus Box 1070, or by e-mail, Betsy_Rogers@aismail.wustl.edu.

Record

Washington University community news

News & Comments

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Medical School Update

Bacterial suicide Researchers discover how bladder responds to infection

BY LINDA SAGE

In a discovery that holds hope of helping women avoid bladder infections, scientists have learned how the bladder responds to bacteria that cause cystitis. They also have found that the bacteria can hide out within the bladder lining, where they could promote further bouts of infection.

"We discovered that cells that line the bladder have a built-in defense mechanism that kicks in when bacteria attach to them — they commit suicide and slough off," said Scott J. Hultgren, Ph.D., who directed the research. "But we also found that some of the bacteria avoid being removed from the bladder by invading underlying cells."

Hultgren is an associate professor of molecular microbiology. One of his postdoctoral fellows, Matthew A. Mulvey, Ph.D., is first author of the paper publishing their results, which appeared in the Nov. 20 issue of the journal *Science*.

Cystitis, or bladder infection, sends 7 million women to the doctor each year. Intense pain,

burning and frequent urination are among its symptoms.

Hultgren's group previously determined that cystitis-causing *E. coli* attach to the bladder lining with hair-like projections called type I pili. The pili are tipped with a protein that locks into receptors on the bladder lining like velcro, enabling the bacteria to cling.

Mulvey wanted to know how the bladder responds to bacterial infection, so he enlisted the help of electron microscopists John Heuser, Ph.D., professor of cell biology and physiology, and G. Michael Veith, senior microscopist in biology.

Images of mouse bladders two hours after infection showed *E. coli* adhering to the lining. These are the first high-resolution snapshots revealing how bacteria can cling to cells.

Covering the bladder lining were hexagonal tiles of proteins called uroplakins. The pili were interacting directly with the uroplakin layer, and they were much shorter than when *E. coli* grows in broth. "Either pilus retraction or hindrance of pilus growth could result in the pile up

of unassembled pilus components in the bacteria, and this is known to switch on certain genes," Hultgren said. "So this could be how *E. coli* senses that it has attached to the bladder lining."

After the bacteria adhered, many of the cells lining the

"We discovered that cells that line the bladder have a built-in defense mechanism that kicks in when bacteria attach to them — they commit suicide and slough off."

SCOTT J. HULTGREN

bladder sloughed off, carrying the attached bacteria with them. Six hours after infection, about 90 percent of the bacteria were lost, and underlying bladder cells were exposed. "This process of bladder cell elimination is thought to be a natural defense mechanism of the urinary tract," Hultgren said.

It also might be an example of altruistic suicide by animal cells in response to infection. Mulvey showed that the bladder cells activated protein-destroying enzymes and cut up their DNA before they sloughed off. "It's a fantastic first line of defense to have a group of cells purposefully killing themselves in order to protect the rest of the tissue," he said.

Twelve hours after infection, mouse bladders treated with a cell suicide-preventing drug contained 85 percent more bacteria than untreated bladders.

The researchers were surprised to find that a laboratory strain of *E. coli* with type I pili was as effective at provoking the suicide response as the clinical strain of *E. coli*. But the same two strains lacking FimH — the adhesive protein at the tips of type I pili — were ignored by bladder cells. "These experiments show that bacterial attachment by FimH is a critical step in triggering the suicide response of bladder cells," Mulvey said.

Despite the bladder's vigorous response to *E. coli*, significant

numbers of bacteria remained 48 hours after infection. Most weren't on the surface, however. Electron micrographs taken two hours after infection showed the bacteria invading the bladder lining, which seemed to be enveloping them. Using biochemical techniques, Mulvey determined that most of the bacteria persisting within the bladder after two days appeared to be hiding out within bladder cells.

"This suggests that the bacteria can resist the bladder's built-in defense mechanism by invading into deeper tissue," Hultgren said. "That may explain why many patients have recurrent bladder infections despite antibiotic treatment, which may not efficiently kill bacteria protected within the bladder cells."

Hultgren's work eventually could help women avoid bladder infections altogether. His group has developed FimH into a vaccine that proved effective against cystitis in mice and should be tested in humans within the next two years. "A vaccine could prevent all of this from occurring in the first place," Hultgren said.

Dermatologist Lynn Cornelius named associate dean for faculty affairs

Lynn A. Cornelius, M.D., assistant professor of dermatology, has been named associate dean for faculty affairs at the School of Medicine.

William A. Peck, M.D., executive vice chancellor for medical affairs and dean of the medical school, announced her appointment.

"We are most pleased that Lynn Cornelius has accepted this newly created position. She has the background and personal skills to fulfill the mission of the office," Peck said.

In her new position, Cornelius will work with department heads to ensure that junior faculty receive appropriate mentoring and the reviews that are essential for long-term professional development.

She also will collaborate with department heads to provide senior faculty with elective

opportunities to improve mentoring skills, develop strategies and accountability measures to increase diversity at all faculty levels and assure equitable compensation policies that sustain outstanding researchers, clinicians and teachers. In addition, she will maintain and distribute University and medical school policies, oversee orientation events for new faculty members, initiate forums on faculty development and address issues of faculty concern.

Cornelius is vice chairman of the Missouri Chapter of the Dermatology Foundation and currently has grants from the National Institutes of Health, the Barnes-Jewish Hospital Foundation and the Dermatology Foundation.

She joined the Washington University faculty in 1993 as an assistant professor of medicine.



Celebratory reunion Pioneering double-lung transplant recipients Doris Mathews (left) and Ann Harrison recently traveled to St. Louis to reunite with their surgeons, Joel D. Cooper, M.D., (far left) the Evarts A. Graham Professor of Surgery, and G. Alexander Patterson, M.D., the Joseph C. Bancroft Professor of Surgery. The women, who suffered from emphysema, received the world's first double-lung transplants 12 years ago.

Bizarre twist Scientists find first protein in central nervous system junctions

BY LINDA SAGE

Scientists have identified the first protein needed for synapse formation in the central nervous system. Synapses are connections between cells that make the nervous system function.

Due to a bizarre twist of evolution, the protein also appears essential for using a trace element called molybdenum.

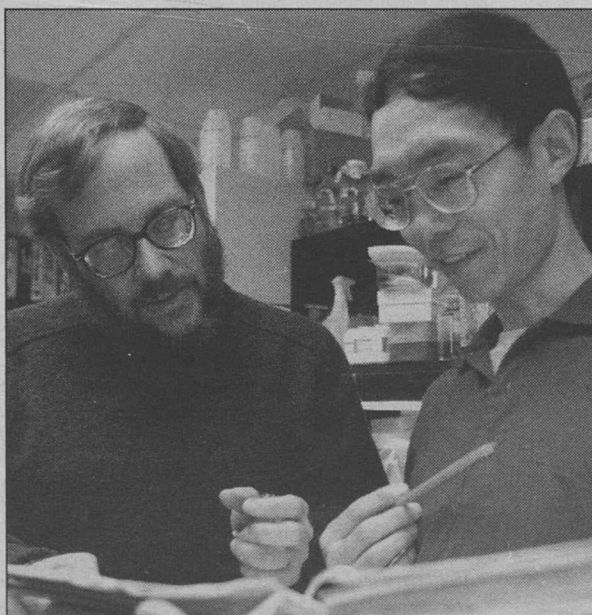
When the protein is missing, mice display symptoms of two life-threatening human diseases. In one, stiff baby syndrome, some synapses in the spinal cord fail to function properly. In the other, molybdenum cofactor deficiency, cells can't make proper use of molybdenum.

"This is an amazing illustration of how wacky nature can be," said Joshua R. Sanes, Ph.D., a neurobiology professor at the School of Medicine. One of his postdoctoral fellows, Guoping Feng, Ph.D., and Hartmut Tintrop, a graduate student from the lab of Heinrich Betz, M.D., at the Max-Planck Institute for Brain Research in Frankfurt, Germany, are first authors of the paper, which appears in a recent issue of *Science*.

Betz and colleagues discovered

the protein gephyrin in 1982, isolating it from the spinal cord and brain. They named it after the Greek word for "bridge" because they thought it might connect nerve cell receptors to the cell's internal skeleton, anchoring them in the right place to receive messages from other nerve cells.

A chemical called glycine delivers these messages at some synapses in the spinal cord, damping the activity of recipient cells. It therefore plays a tug-of-war with other chemicals that stimulate the same nerve cells, keeping those cells in balance. When the nerve cells fail to receive glycine signals, they overreact to positive signals and in turn overstimulate muscles. Strychnine, which is commonly used as a rat poison, induces spastic paralysis by blocking receptors for glycine. People with faulty glycine



Joshua R. Sanes, Ph.D., (left) and postdoctoral fellow Guoping Feng, Ph.D.

receptors are extremely sick because of excessive contraction of their muscles.

For the past 20 years, Sanes has studied the synapse between nerve cells and muscle, the neuromuscular junction. One of the synaptic proteins his group discovered links stimulatory

receptors to the cellular skeleton. He therefore wanted to explore the role of gephyrin, which appeared to play a corresponding role in the central nervous system.

To obtain definitive proof of function, Feng and Tintrop inactivated the gephyrin gene in mice and studied the outcome. Mice that lacked both copies of the gene failed to cluster the glycine receptors in their spinal cord neurons. They also extended their bodies and were spastic, dying within a day of birth. These symptoms were very similar to those induced in mice by strychnine and would

be expected if lack of gephyrin sabotages the development of inhibitory synapses.

Betz also had determined that gephyrin's amino acid content was surprisingly similar to that of bacterial proteins that process molybdenum, which is required by all living cells. Molybdenum, a

heavy metal, makes certain enzymes work. "Reading the literature, I also realized that the symptoms of our mutant mice were very similar to those of molybdenum cofactor deficiency disease," Feng said. "Those patients have seizures early in life, and they extend their body and limb muscles just like our gephyrin mutants. They also can't suckle milk, and our mice had difficulty feeding."

Feng and Tintrop performed the definitive test for molybdenum cofactor deficiency by assaying liver and intestine for two unrelated molybdenum-requiring enzymes. Neither was active in the gephyrin-deficient mice. The researchers also showed that the spasticity of these mutants really did result from a lack of inhibitory synapses in the spinal cord as well as from molybdenum cofactor deficiency.

"We came to the remarkable conclusion that this protein is required for making inhibitory synapses in the spinal cord and also is required to use molybdenum in all tissues," Sanes said. "So it looks to us as if gephyrin has two seemingly unrelated functions — an amazing example of nature using whatever works to get the job done."

University Events

Edison Theatre announces OVATIONS! Series spring schedule

Theatre, music, dance and magic coming our way

BY LIAM OTTEN

Who says there's nothing to do in St. Louis? Next semester the Edison Theatre OVATIONS! Series will continue to bring local audiences its dependable complement of world-class theatre, music, dance and magic.

"Each year's program is different, each year's program is unique," said Evy Warshawski, director of Edison Theatre. "This year we've tried to bring in something for everyone, from the cutting edge to family events."

The new semester lineup opens Jan. 22, when London's popular Improbable Theater performs "70 Hill Lane," an imaginative combination of ghost story and fairy tale. Later in the semester, theatre lovers also will find themselves treated to a crash course in the history of magic when "Ricky Jay and His 52 Assistants" take the stage March 17-21. One warning: "Ricky Jay and His 52 Assistants" is currently sold out. However, theater-goers will want to be on the lookout for a possible announcement regarding additional dates.

Theatre-goers also will want to be on the lookout for The Acting Company, one the

country's finest touring repertory companies, which will perform two classics of world drama March 26-27, Moliere's "Tartuffe" and Shakespeare's "Twelfth Night."

Music lovers can look forward to a pair of legendary vocal groups as well as to a visit by one of today's most influential composers. On Feb. 6, the southern gospel quintet the Blind Boys of Alabama — still going strong six decades after their founding at the Taladega Institute for the Deaf and Blind — will share the stage with a cappella sensations The Persuasions. Two weeks later, on Feb. 19, visionary composer Phillip Glass will present a rare evening of solo acoustic piano music.

Once again, the Edison will join forces with Dance St. Louis to present some of the finest dance companies working today. From Jan. 29-31, the iconoclastic Trisha Brown Company will lead audiences through undiscovered territory with equal parts elegance, humor and risk. On Feb. 26 and 27, a special family event, Rhythm in Shoes with guest Keith Terry, breathes new life into traditional forms such as clogging, reels, jigs, Irish step and square dances. The OVATIONS!

Series will conclude April 30-May 2 with Danny Buraczski's JAZZDANCE, which translates the exuberant spirit of jazz into pure motion.

"What I love about Edison Theatre audiences is that they're so open and adventurous," said Warshawski. "Even if they haven't heard of a particular artist, they're willing to take a chance because they know that whatever they see will be interesting and rewarding. That's really the best compliment I can think of."

The complete spring schedule:

- **Jan. 22-23:** The Improbable Theater in "70 Hill Lane."
- **Jan. 29-31:** Trisha Brown Company.
- **Feb. 6:** Blind Boys of Alabama and The Persuasions.
- **Feb. 19:** Phillip Glass, solo piano.
- **Feb. 26-27:** Rhythm in Shoes with guest Keith Terry.
- **March 17-21:** "Ricky Jay and His 52 Assistants."
- **March 26-27:** The Acting Company in "Tartuffe" and "Twelfth Night."
- **April 30, May 1-2:** JAZZDANCE by Danny Buraczski.

For ticket information or to request a brochure, call 935-6543.



Magician Ricky Jay brings his famous 52 Assistants to Edison Theatre March 17-21.

Indiana Jones • American Rockies • Women's Health • Edgar Allen Poe

"University Events" lists a portion of the activities taking place at Washington University through winter break. For a full listing of medical rounds and conferences, see the School of Medicine's website at medschool.wustl.edu/events/. For an expanded Hilltop Campus calendar, go to www.wustl.edu/thisweek/thisweek.html.

Exhibitions

"Architecture Exhibit." Work of Adrian Luchini, assoc. prof. of architecture. Through Dec. 18. Givens Hall, first floor.

"A Definite Claim to Beauty: William Morris' Kelmscott Press and Its Influence." Through Jan. 29. Olin Library, Special Collections, fifth floor.

Films

Friday, Dec. 11

7 and 9:30 p.m. **Filmboard Feature Series.** "Terminator II: Judgement Day." (Also Dec. 12, same times, and Dec. 13, 7 p.m.) Cost: \$3 first visit; \$2 subsequent visits. Room 100 Brown Hall. 935-5517.



'Messiah' and Mozart to be presented in campus holiday concerts Dec. 11-13

The Department of Music in Arts and Sciences is offering three holiday concerts this weekend.

The Washington University Opera will present "An Evening of Mozart" at 8 p.m. Friday and Saturday, Dec. 11 and 12, in Umrath Hall Lounge. Jolly Stewart, director of the opera, will conduct the programs.

At 3 p.m. Sunday, Dec. 13, the department will present its annual sing-along performance of George Frideric Handel's oratorio "Messiah" in Graham Chapel. John Stewart,

Midnight. Filmboard Midnight Series. "Indiana Jones and the Temple of Doom." (Also Dec. 12, same time, and Dec. 13, 9:30 p.m.) Cost: \$3 first visit; \$2 subsequent visits. Room 100 Brown Hall. 935-5517.

Lectures

Thursday, Dec. 10

11:15 a.m.-12:15 p.m. **Center for Mental Health Services Research brown bag lunch/seminar.** "Screening for Mental Disorder and Service Need." Lee Robins, prof. of sociology in psychiatry. Room 39 Goldfarb Hall. 935-5687.

4 p.m. **Chemistry seminar.** "Biophysical Investigations of DNA Condensation and Cation Binding." Nicholas Hud, U. of California-Los Angeles. (Coffee 3:40 p.m.) Room 311 McMillen Lab. 935-6530.

4:15 p.m. **Philosophy lecture.** "Dewey and Santayana on German Philosophy." Richard Ruben, Data Design Co. Room 100 Busch Hall. 935-6670.

4:30 p.m. **Mathematics colloquium.** Jade Vinson, Princeton U. Room 199 Cupples I Hall. (Tea at 4 p.m., Room 200 Cupples I Hall.) 935-6760.

Friday, Dec. 11

9:15 a.m. **Pediatric Grand Rounds.** "Interaction of Human Parainfluenza Virus

Type 3 With the Host Cell Surface." Anne Moscona, chief, Div. of Pediatric Infectious Diseases, and assoc. prof. of pediatrics and of cell biology and anatomy, Mt. Sinai School of Medicine. Clopton Aud., 4950 Children's Place. 454-6006.

Noon. Cell biology and physiology seminar. "Mechanisms Regulating Endocytosis in a Genetically Tractable Professional Phagocyte." James Cardelli, Dept. of Microbiology and Immunology, Louisiana State U. Medical Center. Room 426 McDonnell Medical Sciences Bldg. 362-5104.

4 p.m. **Geometry colloquium.** Quo-Shin Chi, assoc. prof. of mathematics. Room 199 Cupples I Hall. 935-6760.

Monday, Dec. 14

Noon. Molecular biology and pharmacology seminar. "Using Enantioselectivity to Probe the Mechanism of Steroid-Induced Anesthesia." Doug Covey, prof. of molecular biology and pharmacology. The Philip Needleman Library, Room 3907 South Bldg. 362-2725.

4 p.m. **Immunology Research Seminar Series.** "The Dynamics of T Lymphocyte Activation." Antonio Lanzavecchia, Basel Institute for Immunology, Switzerland. Eric P. Newman Education Center. 362-2763.

Tuesday, Dec. 15

Noon. Molecular microbiology/microbial pathogenesis seminar. "Evolution of Bacterial Genomes." Jeffrey Lawrence, Dept. of Biological Sciences, U. of Pittsburgh. Cori Aud., 4565 McKinley Ave. 362-3692.

4 p.m. **Chemistry seminar.** "Metal-Metal Bonding and Valence Delocalization in the Cu₂ Center of Cytochrome c Oxidase; Electronic Structure Contributions to Biological Electron Transfer." Daniel Gamelin, U. of Bern, Switzerland. (Coffee 3:40 p.m.) Room 311 McMillen Lab. 935-6530.

4 p.m. **Physics/computational neuroscience seminar.** "Global Processing at Intermediate Levels of Human Form Vision." Hugh R. Wilson, Visual Sciences Center, U. of Chicago. Room 241 Compton Hall. 935-6276.

Wednesday, Dec. 16

6:30 a.m. **Anesthesiology Grand Rounds.** "Prevention of Blood-Borne Pathogen Exposure." Victoria Fraser, assoc. prof. of medicine. Wohl Hospital Bldg. Aud. 362-6978.

8 a.m. **Obstetrics and Gynecology Grand Rounds.** "Tips and Tools for Clinical Teachers and Mentors." Debra A. DaRosa, prof. of surgery and medical education, Northwestern U. Medical School. Clopton Aud., 4950 Children's Place. 362-1016.

Thursday, Dec. 17

11:15 a.m.-12:15 p.m. **Center for Mental Health Services Research brown bag lunch/methodology workshop.**

"The Measurement of Mental Health Service Use." Enola Proctor, Arlene Stiffman, profs. of social work; Nancy Morrow-Howell, assoc. prof. of social work; and David Pollio, asst. prof. of social work. Room 39 Goldfarb Hall. 935-5687.

4 p.m. **Chemistry seminar.** "Probing the Electronic Structure of Potential Laser Materials and Metalloprotein Active Sites." Thomas Brunold, Stanford U. (Coffee 3:40 p.m.) Room 311 McMillen Lab. 935-6530.

Friday, Dec. 18

9:15 a.m. **Pediatric Grand Rounds.** "Hypoplastic Left Heart Syndrome (HLHS) at the Millennium." Charles E. Canter, assoc. prof. of pediatrics. Clopton Aud., 4950 Children's Place. 454-6006.

Noon. Cell biology and physiology seminar. "Biogenesis of Dense-Core Secretory Granules." Hsiao-Ping Moore, Dept. of Molecular and Cell Biology, U. of California-Berkeley. Room 426 McDonnell Medical Sciences Bldg. 747-4233.

Monday, Jan. 4

Noon. Molecular biology and pharmacology seminar. "Synaptic Competition at the Neuromuscular Junction." Jeff W. Lichtman, prof. of anatomy and neurobiology. The Philip Needleman Library, Room 3907 South Bldg. 362-2725.

Wednesday, Jan. 6

6:30 a.m. **Anesthesiology Grand Rounds.** Franklin Dexter, assoc. prof., Dept. of Anesthesiology, U. of Iowa Hospitals and Clinics, Iowa City. Wohl Hospital Bldg. Aud. 362-6978.

Friday, Jan. 8

6 and 8:30 p.m. **Travel lecture series.** "Crown Jewels of the American Rockies." Joe and Mary Liz Adair. Graham Chapel. Cost: \$4.50. 935-5212.

Monday, Jan. 11

Noon. Molecular biology and pharmacology seminar. David Holtzman, asst. prof. of neurology. The Philip Needleman Library, Room 3907 South Bldg. 362-2725.

Wednesday, Jan. 13

6:30 a.m. **Anesthesiology Grand Rounds.** "How Can It be Pre-eclampsia Without Hypertension and Proteinuria?" Michael Nelson, prof., Dept. of Obstetrics and Gynecology. Wohl Hospital Bldg. Aud. 362-6978.

Music

Friday, Dec. 11

8 p.m. **Festival of Carols.** Traditional and contemporary carol concert to help fund Catholic Student Center mission trip to Haiti. Cost: \$5, \$3 for students. Catholic Student Center. 725-3358.

8 p.m. **WU Opera.** "An Evening of Mozart." Jolly Stewart, director. (Also Dec. 12, same time.) Umrath Hall Lounge. 935-4841.

Sunday, Dec. 13

1 p.m. **Piano students' recital.** Kathi Kurtzman, applied music instructor. Steinberg Hall Aud. 935-5574.

3 p.m. **Sing-along.** George Frideric Handel's "Messiah." John Stewart, director. Copies of music available. Graham Chapel. 935-4841.

Performances

Friday, Dec. 11

8 p.m. **OVATIONS! series performance.** Don Byron and His Mini Big-Band play "Bug Music." Cost: \$23. Edison Theatre. 935-6543.

Miscellany

Thursday, Dec. 10

7:30 p.m. **Feminist reading group meeting.** Discussion of Marianne Hirsch's "Family Frames: Photography, Narrative and Post-Memory." Hurst Lounge, Duncker Hall. 935-5102.

Friday, Dec. 11

8 a.m. Office of Continuing Medical Education. "Contemporary Women's Health Issues." CME credit available; WU faculty and students also may attend free of charge. Eric P. Newman Education Center. To register, call 362-6891.

11:30 a.m. Woman's Club mini-luncheon and program. "Fashion Design Through the Years." Jeigh Singleton, dir. of fashion design. Cost: \$8.25. Women's Bldg. Lounge. 727-9916.

Saturday, Dec. 12

8 a.m. Office of Continuing Medical Education. "Contemporary Management of Acute Myocardial Infarction." Eric P. Newman Education Center. To register, call 362-6891.

9 a.m. Fine Arts Institute workshop. "Papermaking." John Bielik. Cost: \$40. Room 212 Bixby Hall. 935-4643.

1:30 p.m. Fine Arts Institute workshop. "Paper Marbling." John Bielik. Cost: \$40. Room 212 Bixby Hall. 935-4643.

Sunday, Dec. 13

2 p.m. Contemporary Fiction and Non-Fiction Reading Group. Discussion of George Egton Hatvay's "The Murder of Edgar Allen Poe: A Novel." West Campus Conference Center, lower level, 7425 Forsyth Blvd. 481-0730.

Tuesday, Jan. 12

4:30-5:30 p.m. WU Wind Ensemble auditions. Open to all WU students; one credit hour available. Special need for clarinet, saxophone, trumpet and percussion players. West Campus Rehearsal Hall. 872-7181 or 935-5505.

Sports**Thursday, Dec. 10**

7:30 p.m. Men's basketball team vs. Maryville U. Field House. 935-5220.

Saturday, Dec. 12

2 p.m. Men's basketball team vs. MacMurray College. Field House. 935-5220.

Friday, Dec. 18

7 p.m. Women's basketball team vs. U. of Missouri-St. Louis. Field House. 935-5220.

Saturday, Dec. 19

7:30 p.m. Men's basketball team vs. U. of Missouri-St. Louis. Field House. 935-5220.

Wednesday, Dec. 30

7:30 p.m. Women's basketball team vs. U. of the South. Field House. 935-5220.

Sunday, Jan. 3

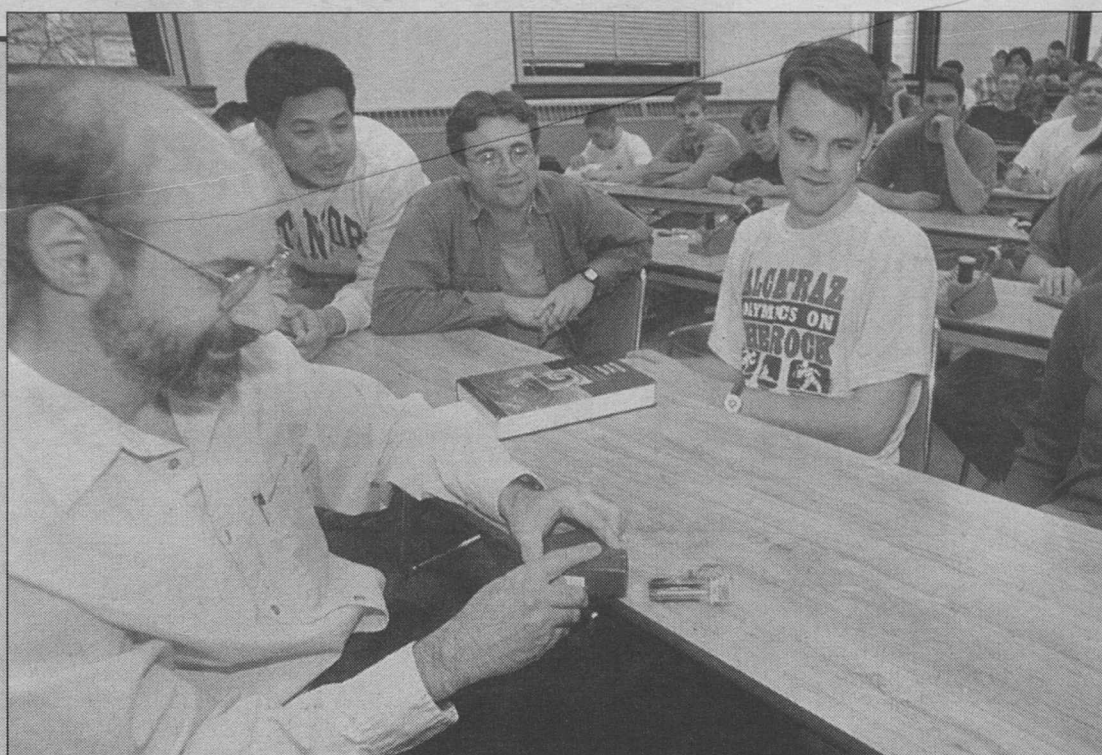
1 p.m. Men's basketball team vs. U. of Chicago. Field House. 935-5220.

3 p.m. Women's basketball team vs. U. of Chicago. Field House. 935-5220.

Friday, Jan. 15

6 p.m. Women's basketball team vs. New York U. Field House. 935-5220.

8 p.m. Men's basketball team vs. New York U. Field House. 935-5220.



Mini-robot David P. Miller, Ph.D., a robotics expert and a NASA consultant from Reston, Va., demonstrates the BYOBot, a mini-robot with light-seeking, changeable behaviors, to students in Mechanical Engineering 304, taught by Mark Jakiela, Ph.D., the Lee Hunter Associate Professor of Mechanical Design, Dec 3. Miller, the guest of Linda Kral, Ph.D., assistant professor of mechanical engineering, demonstrated the benefits of design simplification to students, who worked on kits to assemble their own mini-robots. Participating students included (from left) senior James Chiu and juniors Brian Whitehead and Dennis Cheek.

Trustees elect new member; admissions numbers strong

The Washington University Board of Trustees elected Lawrence Earl Thomas, general partner of Edward Jones, as a new trustee at its meeting Friday, Dec. 4. The trustees also issued a resolution in memory of the late Clark M. Clifford, an emeritus trustee of the University.

Chancellor Mark S. Wrighton reported to the trustees that the admissions picture for freshmen entering in the fall of 1999 appears to be very strong, with applications running ahead of last year. He also noted that the Danforth Scholars Program has been initiated with the naming of 14 current graduate and undergraduate students to this program that recognizes William and Elizabeth Danforth's high ideals of integrity,

selflessness, leadership, commitment to community service, strong scholarship and academic accomplishment. The honorees represent all schools of the University. Wrighton said that more than 2,700 Danforth Scholar nominations already have been received for the 1999-2000 academic year.

Wrighton reported on the status of the capital campaign, including the campus component of this \$1 billion effort. He announced the fourth meeting of the University's International Advisory Council for Asia in mid-March in Tokyo. He commented on the status of the searches for a dean of the School of Law and for a distinguished scholar to be the first person to

hold the Susan and William Stiritz professorship in women's studies.

Wrighton noted the recent naming of Raymond E. Arvidson, Ph.D., chairman of the Department of Earth and Planetary Sciences in Arts and Sciences, as a James S. McDonnell Distinguished University Professor and the appointment of Albert P. Trulock, M.D., to the Rosemary and Jerome Flance Professorship. Trulock is a specialist in pulmonary medicine in the Department of Internal Medicine.

Trustees were presented an overview of the University's current policies and future plans for affirmative action in the admissions process. The presentation was made by Wrighton; John A. Berg, associate vice chancellor;

and James E. McLeod, vice chancellor for students and dean of the College of Arts and Sciences.

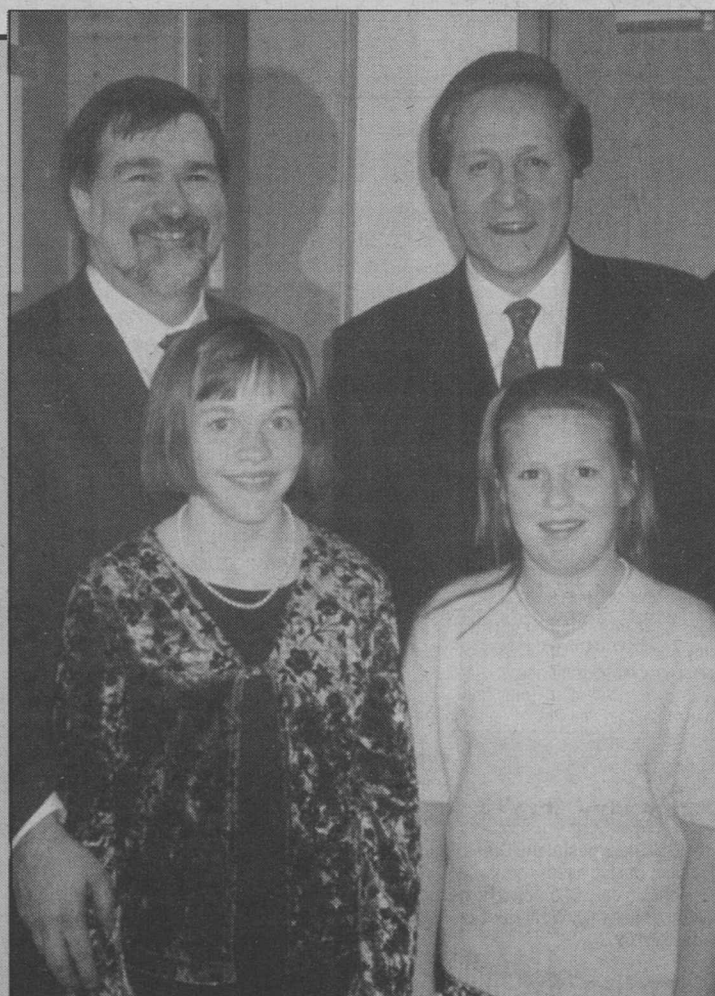
The committee reports to the trustees included presentations on the tuition-setting process and a range of tuition rate increases for the 1999-2000 fiscal year for the Hilltop Campus. It is expected that the University will announce the rates for undergraduate tuition in January 1999.

The development committee report announced that the campaign for Washington University had raised \$618.8 million toward its goal of \$1 billion. Other committee reports were provided in the following areas: buildings and

grounds, educational policy, research-graduate affairs, students and alumni.

Thomas, the new trustee, earned a bachelor's degree in business administration from Washington University in 1977. He began working as an intern for Edward Jones while he was still in college. Thomas is general partner, government bond marketing, for Edward Jones, and he heads the firm's sales force for the northeastern United States.

His many University activities include serving currently as vice chair of the Alumni Board of Governors and co-chair of his class reunion committee. In 1997 he received the distinguished alumni award from the John M. Olin School of Business.

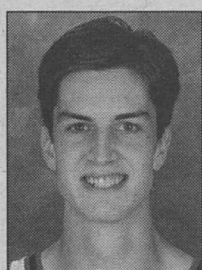


Honored in Sweden Christopher I. Byrnes, Ph.D. (left), dean of the School of Engineering and Applied Science, and Claude Cohen Tannoudji, Ph.D., professor at the College de France, Paris, stand with Byrnes' daughters Kathleen (left) and Alison at a Nov. 20 ceremony honoring the two at the City Hall of Stockholm, Sweden. Byrnes and Tannoudji received honorary doctor of technology degrees from Kungl. Tekniska Högskolan (KTH), known as the Royal Institute of Technology. Tannoudji, who won the 1997 Nobel Prize for physics, was honored for his research on lasers and Byrnes for his pioneering work in linear control systems analysis and his solution of several longstanding fundamental problems in the field.

Sports Section

Men hoopsters win tournament

Washington University's men's basketball team shook off a four-game losing streak and responded with two victories to capture the championship of Washington & Lee University's 250th Celebration Tournament. In a tournament-opening 88-59 victory over Skidmore College



David Cerven

(N.Y.), sophomore forward Chris Alexander scored a game-high 26 points and classmate Ryan Patton added 17 for the Bears, who never trailed in the game. In the championship game, a 66-64 victory over host Washington & Lee, tournament Most Valuable Player David Cerven paced all players with 20 points and seven rebounds. Patton scored 15 points and all-tournament honoree Alexander posted 14 as Washington U. rallied in the second half for the victory. The Bears trailed 26-24 at halftime, but opened the second half with a 17-6 spree and took the lead for good on a Cerven jumper with 17:28 to play in the game. The Generals had two three-point attempts in the

final seconds, but the final shot glanced off the rim at the buzzer.

Women's basketball wins third tournament

The University's women's basketball team won the Washington & Lee University 250th Celebration Tournament, extending its winning streak to 14 games. The Bears knocked off Skidmore College (N.Y.), 82-50, in the first round and defeated Middlebury College (Vt.), 79-68, in the championship game. WU jumped to a 15-0 lead against Skidmore and led 41-22 at the half. They led by as many as 36 late in the game as they coasted to the win. Senior center Alia Fischer led all scorers with 19 points and grabbed a game-high nine rebounds. Sophomore Tasha Rodgers and senior Jana Herrman were the only other players in double figures with 10 each as all 13 players scored. The Bears took a 39-26 halftime lead over Middlebury in the championship game and held on for an 11-point win. Fischer again led all scorers with 25 points, one shy of a season-high, and added seven rebounds. Rodgers had 19 points, junior



Alia Fischer

Sue Tucker had 10 and fellow junior Emily Harold scored six points and added six rebounds. Fischer was named tournament MVP after scoring 44 points and adding 16 rebounds. Rodgers was also named to the all-tournament team. WU is 6-0 this year and has won 14 straight, the third-longest winning streak in school history, after finishing last season with eight consecutive victories.

Tankers victorious at Chicago tourney

The men's and women's swimming and diving teams each took home titles last weekend at the University of Chicago Invitational. Freshman Lindsay Wilkinson was the top performer on the women's side, earning three provisional qualifying times for the NCAA Division III Championships. She won the 200 back with a time of 2 minutes, 11.34 seconds and the 100 back with a time of 1:00.67. She also won the 50 free in 24.74. Chris Thelen was the top swimmer on the men's side, picking up two wins and a third place finish. He won the 1,650 free in a time of 17:26.74 and the 500 free in 5:00.80. He was third in the 400 individual medley, clocking in at 4:25.20.

Compiled by Kevin Bergquist, director, sports information, and Keith Jenkins, asst. director, sports information.



Helping hands The Accounting Services Office is adopting four families through the United Way's 100 Neediest Cases after a successful year of fund-raising efforts, including a Valentine's Day raffle, bake sales and a silent auction. Staffers paid \$1 for the privilege of dressing casually during holiday weeks and made donations of money, toys, clothes and personal items. Above (from left) Lois Newell, Cherie Moore and Jonie Williams browse at a white elephant sale held earlier this fall. This is the fourth year Accounting Services employees have embarked on year-round fund raising to help needy families during the holiday season.

Diabetes

Tailoring health program for American Indians

— from page 1

American-oriented program in St. Louis, the American Indian project helps community members to learn new, more nutritious methods of preparing traditional foods and to spread word of these techniques among friends and family. Both programs couple the skills of diabetes and nutrition experts in the School of Medicine with the community outreach and social services expertise of the social work school.

There is already a diabetes screening program in place on the

reservation, but Cynthia Lopez, health educator for the tribe's Department of Human Services, said it lacks the resources it needs to be effective.

"It's a big problem out there," said Lopez, who is encouraged by the Washington University initiative. "I think we'll get a lot of support."

Officials believe that genetic markers, dietary patterns, obesity and sedentary lifestyles are responsible for the near epidemic rates of NIDDM among American Indians. Obesity, diet and exercise have been targeted as factors that can be changed and controlled to prevent or at least delay the onset of diabetes and, once it has set in, to reduce its complications.

Researchers point to changes in the lifestyles of tribe members — a move away from traditional

foods and activities — as part of the problem.

"Our people used to eat a lot of vegetables and beans," said Lopez. But then came electricity and refrigerators "and ice cream and chips."

Plans call for the core group of five tribal members who attended the organizational sessions on campus to recruit and train more volunteers from the reservation. They will in turn set up programs in each of the Hickawan District's seven villages to educate their residents, screen them for diabetes and motivate them to exercise. They also hope to teach them to cook healthier foods and encourage them to revert to a more traditional, active lifestyle.

Brown, a registered member of the Pascua Yaqui-Tohono O'odham tribes in Arizona, is a co-director of the reservation's diabetes prevention program. He also is a former assistant secretary of Indian affairs under President George Bush.

"Many people get involved in working with Indian communities who have very little faith in the people," Brown said, "but I've seen that people and communities can change."

Because many residents live in remote areas, getting the word out will not always be easy. "Sometimes we will have to go door to door to explain it all," Lopez said.

The job is, admittedly, a massive one, Brown acknowledged. But if it is successful, it can be duplicated in the tribe's other 10 districts and possibly exported to other reservations.

"The NIH grant ends in five years," Auslander said, "but the resources will stay in the community. We want the reservation to develop its own capacity to deal with the problem in the future."

Websites

High-technology help available for teachers

— from page 1

open a notebook and take the cap off your pen, you turn on the computer and open an application," said Atnip, who helped teach the first two sessions with Elizabeth Peterson, associate director of the Teaching Center. "It's a different set of motions, but it's essentially the same concept."

"Generally when you take a moment to explain that, people realize that it's not as daunting as they thought," Atnip said. "And the attitude that 'I'm too old to learn these tricks' or 'I don't have time for this' tends to melt away."

Helping supply the know-how in the third session was Ruth Lewis, who has served as a biology librarian here since 1985 and has taught a course in University College titled "The Internet for Biologists" three times.

Lewis said a welcome

byproduct of the technological surge is that faculty and librarians share another collaborative opportunity.

"We've been using telecommunications to get data for 25 or 30 years in librarianship," she said. "So this is just a logical progression. The technology creates a convenient bridge between the librarians and the faculty. In the same way, it's a bridge between faculty and students."

And students are often the ones pushing the proverbial fast-forward button, Atnip said. "Students are coming in having had e-mail access in elementary school and having played Nintendo since the time they could be propped up in front of the TV," she said. "They're the electronic generation and they're hitting us now. They want to communicate by e-mail with the professors and turn in their homework by using electronic means and meet using video-conferencing software."

Therein lies the challenge for faculty, Davis said — to keep one hand poised near the keyboard while cradling a book in the other.

"It is a challenge," acknowledged Davis, who has vowed to spend his semester break creating a Web course page that has a "gold mine" of links to the Library of Congress, The New York Times, the White House and a number of interest groups.

"It adds a new dimension to the lifelong learning that we all know good faculty engage in," Davis said. "We can't now be content with staying up to date in our fields or branching out in a related subsidiary field. Now, we have to be up to date in technology in ways we haven't been before."

Claire Baldwin, Ph.D., was one of the 10 who recently accepted the challenge. "Learning how to use the Web in my teaching is something that I've been wanting to do for a long time, and the workshop was a great service," said Baldwin, assistant professor of Germanic languages and literatures.

"There are a lot of resources that are available on the Web — many that are not as readily or easily available in other means," Baldwin said.

"But I see the use of technol-

ogy as a supplement to augment teaching — not as a replacement for other kinds of pedagogical interaction."

Which is precisely the point, Davis concluded. "There's no question in my mind that teaching is a lot more than just the application of technology," he said. "There's always going to be room for the stimulating lecture, the provocative discussion. I will always be sending students to the library — in fact, the more students get used to the Internet, the more I practically have to beg them to go to the library."

"But the fact that those traditional practices will continue does not deny the fact that technology can be an increasingly important component and that the Internet can be a major source of enrichment."

Second workshop set

A second opportunity to engage in the Teaching Center faculty workshop will take place Jan. 6-8 from 10 a.m. to noon in Eads 014. Those interested should contact Liz Peterson at lizp@wuacn.wustl.edu.

New process aims to get word out about limited-competition grants

Vice Chancellor for Research Theodore J. Cicero, Ph.D., has developed a process to distribute information and review applications for limited-competition research grants in the interests of improving communication with faculty about these unique funding opportunities.

The University receives many notifications of research funding for which applications are limited to one or two per institution. Cicero's new

procedures seek to ensure that eligible faculty are aware of and can consider applying for these funds.

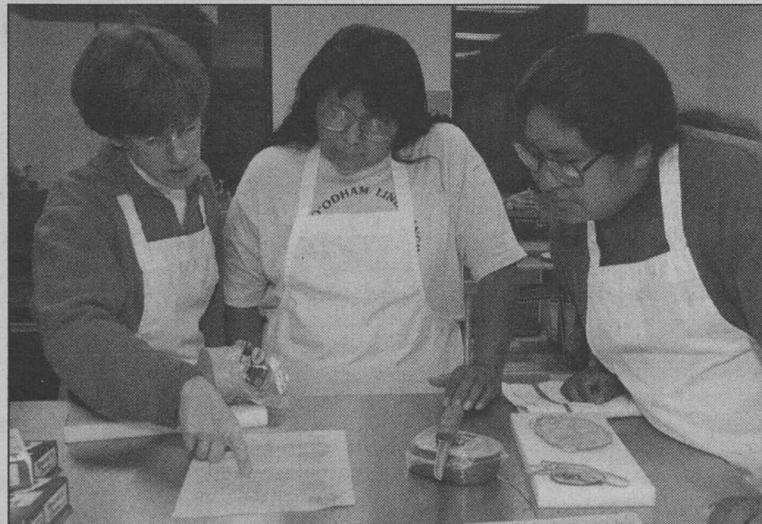
The policy also provides for an objective process to select the best possible applications for submission in those instances when more than the limited number of applicants submit proposals for University consideration.

As part of the new process, Cicero's office will send out announcements about these limited competitions for peer-reviewed research funding to deans of schools, who will distribute them to their faculty.

When multiple qualified applications are received within a school, an internal review process will select that school's candidate application, and the dean will forward the chosen application to Cicero. If there are more than the designated number of applications, Cicero will convene a University Selection Committee to choose the proposal that will represent the University. The deans of schools and the vice chancellor for research will make up this committee.

The selected candidate's proposal then will follow standard University proposal submission procedures and be submitted through the appropriate grant administration office.

For more information, call Cicero at 362-7010.



Hope Krebill (left), community health nurse at the George Warren Brown School of Social Work, works with Tohono O'odham Nation members Cynthia Lopez (center) and Rosslyn Antone as they adapt a diabetes prevention program for use in their communities.

Campus Watch

The following incidents were reported to University Police from Nov. 29-Dec. 6. Readers with information that could assist in investigating these incidents are urged to call 935-5555. This release is provided as a public service to promote safety awareness and is available on the University Police Website at rescomp.wustl.edu/~wupd.

Dec. 3

2:25 a.m. — Two non-students were arrested for stealing, trespassing, tampering with an automobile, possession of drug paraphernalia and outstanding arrest warrants after students saw them trying to open cars on the parking lot in front of Bixby Hall and notified police. After a brief foot chase, both were caught and a cellular phone was recovered.

Dec. 4

12:54 a.m. — A student was referred to the judicial administrator after a staff member saw the student smoking what was believed to be marijuana outside

Koenig Residence Hall. The smoking apparatus was confiscated.

Dec. 5

11:02 p.m. — A staff member reported that students were throwing bottles from the west side of Eliot Residence Hall. Large amounts of broken glass, empty bottles and cans were found.

University Police also responded to seven additional reports of theft, seven additional reports of vandalism, one additional peace disturbance, three auto accident reports, a suspicious person report, one trespassing report and a fire.

Employment

Use the World Wide Web to obtain complete job descriptions. Go to cf6000.wustl.edu/hr/home (Hilltop) or 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.

Mechanic (Bargaining Unit Employee) 990104
Research Assistant 990111
Publications Editor/Coordinator 990115
Coordinator for Academic Support 990116

Administrative Assistant 990119
Director, Arts and Sciences Annual Fund/Director of Development, Olin Library 990120
Researcher 990122
Administrative Assistant 990123
Department Secretary 990124
Communications Technician I 990127
Financial Service Representative 990128
Graphic Designer (part time) 990129
Faculty Assistant 990131

Government Grants Senior Specialist 990132
Legal Secretary 990133
Library Technical Assistant 990134
Shelving Assistant 990135
Assistant Director, Development Services 990139
Receptionist/Secretary 990140
Circulation Services Assistant 990141
Accounting Operations Project Manager 990142
Administrative Assistant 990144

Medical Campus

This is a partial list of positions at the School of Medicine. Employees: Contact the medical school's Office of Human Resources at 362-7196. External candidates: Submit resumes to the Office of Human Resources, 4480 Clayton Ave., Campus Box 8002, St. Louis, Mo. 63110, or call 362-7196.
Database Analyst 990045
Administrative Assistant 990761
Technician 990827

Notables

Four appointed to director positions at Olin School

Four persons recently have been appointed to director-level posts at the John M. Olin School of Business, according to Dean Stuart I. Greenbaum. Joseph P. Fox has been named associate dean and director of full-time and professional MBA programs; Deborah Fite Booker has been appointed assistant dean and director of external relations; Edward M. Novak has been named assistant dean and director of information technology; and Pamela K. Wiese is director of MBA admissions and financial aid.

Fox is responsible for the planning, administration and operation of the full-time and professional (part-time) MBA programs, which currently enroll about 800 students. He is responsible for program direction; student services; and supervision of admissions, student advising, financial aid, recruitment and program direction support.

Most recently, he was assistant dean and director of graduate programs in the College of Business Administration at Marquette University in Milwaukee, where he also was an instructor in accounting and finance. Previously, he was Marquette's acting associate dean and director of the MBA program. Fox received a master of business administration degree in general management from Marquette and a bachelor of science in business administration degree in accounting from John Carroll University in Cleveland.

Booker, who directs external relations, previously was assistant dean and director of MBA programs and financial aid for the business school, which she joined

in 1993. She is responsible for coordination of the school's marketing and communication efforts, including all publications, the Olin Gateway magazine and corporate client relationships. Prior to 1993, Booker was assistant director of MBA programs at the University of Rhode Island at Kingston. She received a master of business administration degree from the University of Maryland at College Park. Formerly, she was marketing manager for a European office-furnishings manufacturer and senior territory manager for a major U.S.-based office-furnishings manufacturer — covering mid-Atlantic states in both instances. Booker received a bachelor of science degree in business from the University of Maryland-University College.

Novak will lead the business school's initiatives in information technology, performing information technology planning and supervising staff responsible for day-to-day computer training and support operations. Most recently, he was based in Tampa, Fla., as chief information officer of Lai-Ward Howell, an executive recruiting firm with operations in more than 12 U.S. cities.

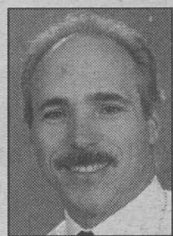
Previously, he was founder and president of New Millennium Advisors, a consulting and investment management firm whose clients included Prudential Securities and Dow Jones and Co. He also was chief information officer for Value Line Inc., a leading financial publisher and investment adviser, for more than 10 years, and he held positions at Union Mutual Insurance Corp., Congoleum Corp., and Baxter Travenol Corp. Novak received a master of management degree



Joseph P. Fox



Deborah Booker



Edward M. Novak



Pamela K. Wiese

from Northwestern University's Kellogg Graduate School of Management, with a triple major in management information systems, quantitative methods and operations management. He received a bachelor of science degree in commerce from the University of Illinois, Urbana-Champaign.

Wiese, whose most recent position was special assistant to the dean of the business school, is responsible for all facets of admissions and financial aid for the full-time MBA and professional (part-time) MBA programs. She is responsible for the design and implementation of a recruiting program. She also oversees daily admissions activities and leads the committee responsible for evaluation of all applications. For six years, she held positions in the University's Office of Undergraduate Admissions, first as student office assistant, then assistant director and then associate director. Wiese participated in the accelerated BSBA/MBA program at the business school, receiving a bachelor of science in business administration degree and a master of business administration degree.

Graduate students earn top honors at national conference

Washington University graduate students in Arts and Sciences came out winners at the National Association of Graduate-Professional Students (NAGPS) 13th national conference, held Nov. 19-22 in Braintree, Mass.

Susan E. Mahan, a Ph.D. candidate in physics from Jackson, Miss., was elected president of NAGPS and two other Washington University graduate students were named to leadership positions with the association. NAGPS' membership includes 225 graduate student associations and graduate schools representing 900,000 graduate and professional students.

As president of NAGPS, the nation's largest association of graduate students, Mahan said she hopes to encourage collaboration between graduate student associations and graduate schools nationwide, particularly as they work together to improve training for teaching assistants, funding opportunities, health care and other campus resources.

"NAGPS takes its cues from our members," Mahan said, "and our members are concerned about their quality of life and career opportunities."

Mahan, who is president of the University's Graduate-Professional Council (GPC), also received a President's Award, which NAGPS presented to 11 graduate/professional students from around the country for outstanding service at the local and/or national level.

In addition to her GPC presidency, Mahan also is the graduate student representative to the University's Board of Trustees, past president of the University's Graduate Student Senate (GSS), and past vice president of NAGPS.

During the conference, Malaina Brown, who is a Ph.D. candidate in anthropology and vice president of the University's GSS, also was elected to NAGPS' board as the Employment Concerns Committee

chair. Rob Hermann, a Ph.D. candidate in history and president of GSS, was elected Human Diversity Coordinator for the South Central Region.

In addition, the GSS was one of eight graduate/professional student organizations nationwide to receive a 1998 NAGPS Program Award at the conference. The GSS won for Excellence in Communications. This is the first time that a Washington University student group has won such an award from NAGPS. It is in recognition of the senate's use of its web site and electronic mailing lists to inform and engage the University's graduate students.

"We are very proud of our graduate student leaders," said Robert E. Thach, Ph.D., dean of the Graduate School of Arts and Sciences. "Year after year, they have brought a well-balanced mix of idealism and practicality to every discussion. They have always been able to see the big picture and to work for the good of the institution as a whole. I am delighted to see that the qualities they embody and the ideas they represent are now making a national impact. We will all benefit from their contributions."

Brown, Hermann and Mahan also were selected to participate in the "Good Practices" session at the conference. The title of their presentation was "The Collaborative Academy: Joint GSA-Graduate School Initiatives."

During the talk the three students discussed techniques for initiating and sustaining collaborative relationships between graduate students and administrators.

"Working together, the GSS, GPC and Graduate School of Arts and Sciences have developed and implemented many new programs and policies in the last five years, including \$25 health insurance, Graduate Student and Faculty Rights and Responsibilities Companion Policies, and New Student Orientation," they said.

Porter Lang named director of disabled services

Fran Porter Lang, Ph.D., has been named director of the Office of Disabled Student Services and associate dean in the College of Arts and Sciences, according to James E. McLeod, vice chancellor for students and dean of the College of Arts and Sciences, and Karen Levin Coburn, assistant vice chancellor for students and associate dean for the freshman transition.

Porter Lang, a highly recognized behavioral scientist, comes from the University's School of

Medicine. She has been full-time faculty in the Department of Pediatrics' Division of Newborn Medicine, with a joint appointment in the Department of Psychology in Arts and Sciences. At the medical school, she headed an NIH-funded laboratory on pediatric pain research; mentored undergraduate, graduate and medical students; and served on the Admissions Committee.

The mission of the Office of Disabled Student Services is to provide equal opportunities to

students with disabilities and to serve as a resource on disability-related issues to the University community.



Fran Porter Lang

The office facilitates and enhances the academic experience of students through individualized assessment of needs and

provision of accommodations. Porter Lang will work collaboratively with faculty, students and campuswide resources to help students with disabilities develop problem-solving skills and learn strategies that will support their success.

"We're fortunate to have Fran join us in this important role," Coburn said. "Her experience, training and commitment to excellence will be an asset to students and faculty on the Hilltop Campus."

McLeod added: "This position is extremely important to our students and faculty, and we are fortunate to have attracted a person of distinction to it."

Porter Lang earned a bachelor's degree in English literature and religious studies in 1968, a master's degree in psychology in 1973 and a doctorate in psychology in 1977 all from Washington University. She completed a three-year postdoctoral fellowship in sensory physiology and biophysics at the medical school before joining the pediatrics department in 1980.

courses on the American presidency, politics and the media, American military history and national security and defense policy.

Davis was honored for his teaching by the Council of Students of Arts and Sciences in 1993 and again in 1996. In 1997, he received a Distinguished Faculty Award at Founders Day.

Since July 1996, he has divided his time between the political science department and the Teaching Center, a program established in 1990 to enhance the effectiveness of classroom teaching at the University.

"Some faculty believe their job is to engage the material — teach the subject," Davis said. "I believe you must engage the student. You never can assume that the students will give you their attention. You have to earn it and work to keep it."

Davis granted Emerson award for excellence in teaching

James W. Davis, Ph.D., professor of political science in Arts and Sciences and director of the Teaching Center, has been honored with an Excellence in Teaching Award from Emerson Electric Co.

The awards program, now in its 10th year, recognizes outstanding teachers from the St. Louis metropolitan area for their significant contributions to the teaching profession and to their students. Davis and approximately 100 other award recipients were recognized in a ceremony at the Ritz-Carlton Hotel in Clayton.

Davis' teaching and writing deal broadly with American politics and public policy. He has taught about politics in various Arts and Sciences programs and in the schools of business, engineering and social work. His teaching schedule includes an introductory course on American politics as well as

Police employee award created

Officer Joe Schilling and radio dispatcher Richard Chiles have been selected as employees of the month for November and December, respectively, in a new recognition program instituted by the Washington University Police Department.

Department employees are selected after meeting the following criteria: consistent exceptional professional performance (not simply the most highly sensationalized arrest) for an entire month, rapport with peers and the public, attendance and appearance, on- and off-duty

community participation, and initiation of problem-solving strategies.

A committee of officers holding the rank of sergeant, lieutenant and manager reviews nominations and makes the final selection.

Police Director William Taylor presents the employees of the month with a certificate at roll call. A picture and a plaque bearing the employee's name is displayed in the station. Plans call for one of the employees of the month to be selected as employee of the year.

Engineering students win network simulation

A team of School of Engineering and Applied Science students comprised of Samphel Norden, Tilman Wolf, Zubin Dittia and Anshul Kantawala joined forces to win the Andersen Consulting Challenge, held recently on campus.

The third annual competition, which featured \$100 prizes to each of the winners as well as cash awards for the second- and third-place teams, is a simulation of a typical network solutions interaction between designers and a client and is intended to give students an idea of what network consulting is like. Four-member teams picked up a Request for Proposal for a particular client, and worked toward developing a feasible

solution and eventually presented that solution to a panel of judges.

Barry E. Spielman, Ph.D., chair of the electrical engineering department, said the competition stresses networking skills, teamwork, resourcefulness and professionalism. The judges were University faculty and professionals from Andersen Consulting, a premier global management and technology consulting firm.

"This is a valuable experience for students that involves the global economy," said Spielman. "The people at Andersen were extremely impressed with our students. They said that our students performed as well or better than actual consultants."

Washington People



Nina Cox Davis, Ph.D., examines the art and writings of Spain's Golden Age and finds parallels with 20th-century America.

Learning lessons from Spain's Golden Age

Nina Cox Davis finds many links between Renaissance Spain and America today

By, NANCY MAYS

For Nina Cox Davis, Ph.D., studying Spain's Golden Age is a continual source of fascination and ideas; for her students, it's a bit like delving into a 16th- and 17th-century soap opera. The era, which spanned the years from about 1492 to 1650, was fraught with high drama: religious oppression, censorship, misogyny and class struggles, not to mention the European discovery of the New World.

"It's rich and fascinating at every turn," said Davis, chair of the Department of Romance Languages and Literatures and associate professor of Spanish in Arts and Sciences.

Not surprisingly, all that turmoil — from Spain's drive to eradicate its own multiple cultures to exploitation of the New World — provided great fodder for a literary community directly affected by the country's imperial woes. Getting students fascinated with the story lines is surprisingly easy, said Davis. Students, for example, are vitally interested in learning what happened to an earlier Western power's minority culture and understanding the role of the arts in questioning the status quo.

"You can watch them getting more and more drawn into the culture," she said.

For Davis, the best way to study an era's social and political tensions is to examine its art. And while the era may seem to have little in common with modern-day American realities, Davis sees many parallels.

"I always encourage students to make connections, find links," she said.

A multicultural society

On the surface, the Golden Age appeared to support a centralized, collective identity through the monarchy, but that, said Davis, is an invention. The idea might have been fostered by legal edicts but did not take effect culturally. Spain was, she said, the original multicultural society, as diverse as today's American population. Each region, from Catalunya in the northeast to Andalucia in the south, maintained its own language and cultural heritage.

"The nascent Catholic country was actually much more diverse than its ideology would allow," Davis said. "Many socio-political tensions were worked out through the arts."

The term "Golden Age" was coined by 19th-century German intellectuals after the era's heyday. The name was a testament to the Germans' admiration for the exceptional quality of literature, theater in particular, the era produced. Much of the theater at the time dealt with themes of kingship, honor, Catholicism and a rigid class structure, which provided them a model for early expression of their own nationalism. But did it? The question, said Davis, is still debated. She believes, though, that the Germans' interpretation was naive.

"Theater and other prose genre at the time actually questioned the status quo from within a very

Spanish literature.

"They invented entirely fictive characters and situations that allowed for the evaluation of extra-literary context. Despite the act of censorship of books by the Inquisition, literature found ways to open an ideologically very-closed cultural space.

"I think it's important for students to find analogies between contemporary culture and earlier ones," she said.

Davis' scholarship is widely admired. Diana de Armas Wilson, professor of English and Renaissance studies at the University of Colorado-Denver, called her writing "remarkably elegant ... wonderfully instructive and entertaining."

Nina Cox Davis

From Kenosha, Wis.

Education B.A., University of Wisconsin-Milwaukee; M.A., Ph.D., Johns Hopkins University

University positions Chair, Department of Romance Languages and Literatures, and professor of Spanish in Arts and Sciences

Family Husband, Christopher Dadian; daughter, Silvia, 16; son, Kai, 9

Avocations Family and church

"The so-called Golden Age actually gives us a lot of paradigms for our own culture."

complex representation of reality," she said.

So what does royalty and rigid class structure have to do with modern American life?

"The so-called Golden Age actually gives us a lot of paradigms for our own culture," she said.

For example, like Spaniards of that era, we live in a multicultural country that has gradually become more conservative over the years, led by what Davis calls a "vocal Christian right."

"The movement today, like then, glosses over the many important differences of our cultures," she said. "It's easier sometimes for students to see that by studying other countries."

In 16th- and 17th-century Spain under the Catholic monarchy, the Muslim and Jewish presence was ostensibly eradicated by legislation, but a large population of Catholic converts and centuries of cultural intermingling ensured the continued echoes of these voices, particularly in

Washington University, Wilson said, "is fortunate indeed to have on its faculty such a fine scholar and able administrator."

Davis grew up in Kenosha, a small factory town in southeast Wisconsin. While the town's permanent residents were predominantly Caucasian, the city did host a sizable migrant population during the spring planting and fall harvest. Groups of migrant Hispanic farm workers descended on the small town and Davis, who helped with outreach services for the medical community, was drawn to the differences in their traditions.

"It was a very compelling contact," she said.

After studying Spanish and Latin throughout middle and high school, Davis went on to the University of Wisconsin-Milwaukee, where she received a bachelor's degree in Spanish in 1975. She earned a master's degree and doctorate in romance languages from Johns Hopkins University, leaving there in 1982.

Davis joined the Washington University faculty in 1985. She was named chair of the romance languages and literatures department in 1997.

She has written extensively on the Golden Age — satirical prose is her specialty — and is a passionate scholar. But she also derives immense satisfaction from watching students fall in love with another culture. Most students approach Spanish language classes with a great deal of pragmatism, she said, hoping they will increase their marketability. Double majors among undergraduates are not uncommon. But as they master the tools — from the subjunctive to the past perfect — they gradually get to know another world.

Building bridges

The most satisfying undergraduate teaching experience, though, perhaps comes from watching students explore another country. Davis encourages students to study abroad if possible. In fact, she's currently creating a study abroad program in Madrid with the University Carlos III, which will enroll undergraduates next fall and, she hopes, will permit graduate exchanges.

"I love seeing that bridge between the classroom and living in the country," she said. "Students gain a much broader sense of who they are when they live in another country. You watch them come into their own."

Courtney M. Crawford, a junior from Clive, Iowa, approached the idea of studying abroad with excitement but also a bit of trepidation. Davis, however, infused a sense of encouragement and belief that carried him throughout the trip.

"Going to Spain has been one of my most memorable college experiences," he said. "Professor Davis was a source of immense information and advice. She really cares about all of her students."

While Spanish fluency is likely to help an undergraduate who's majoring in business find a job, language students pursuing doctorates still face a difficult job hunt as the market's demands continue to change. With that in mind, Davis is consulting with chairs of other foreign language departments to develop a certificate in pedagogy to expand the job market for students pursuing doctorates in literary studies.

When not serving as chair, teaching a class or pursuing research, Davis keeps busy with her family. Her husband, Christopher Dadian, is an industrial communications consultant who is self-employed. They have two children, a 16-year-old daughter, Silvia, who attends University City High School, and a 9-year-old son, Kai, who attends Jackson Park Elementary School. Family trips to Spain are treasured by all. Their children, in fact, have appreciated such Spanish favorites as squid and octopus since they were little.

Davis and her husband are involved in a number of activities for younger children: She is a scout leader, and he is involved in gifted education. The family also helps to prepare meals for the homeless through their church.

Davis' colleagues marvel at her ability to juggle so many duties so well.

Elzbieta Sklodowska, Ph.D., professor of Spanish, said students like Davis' fresh readings of the classics and her enthusiasm, while colleagues appreciate her receptivity, her warmth and "her ability to perform the high-wire act of being chair with great grace as well as remarkable agility."

"If this were the Golden Age," said Sklodowska, "I'd commission a statue and put it on display in Ridgley Hall."