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Washington University Record, April 2, 1998

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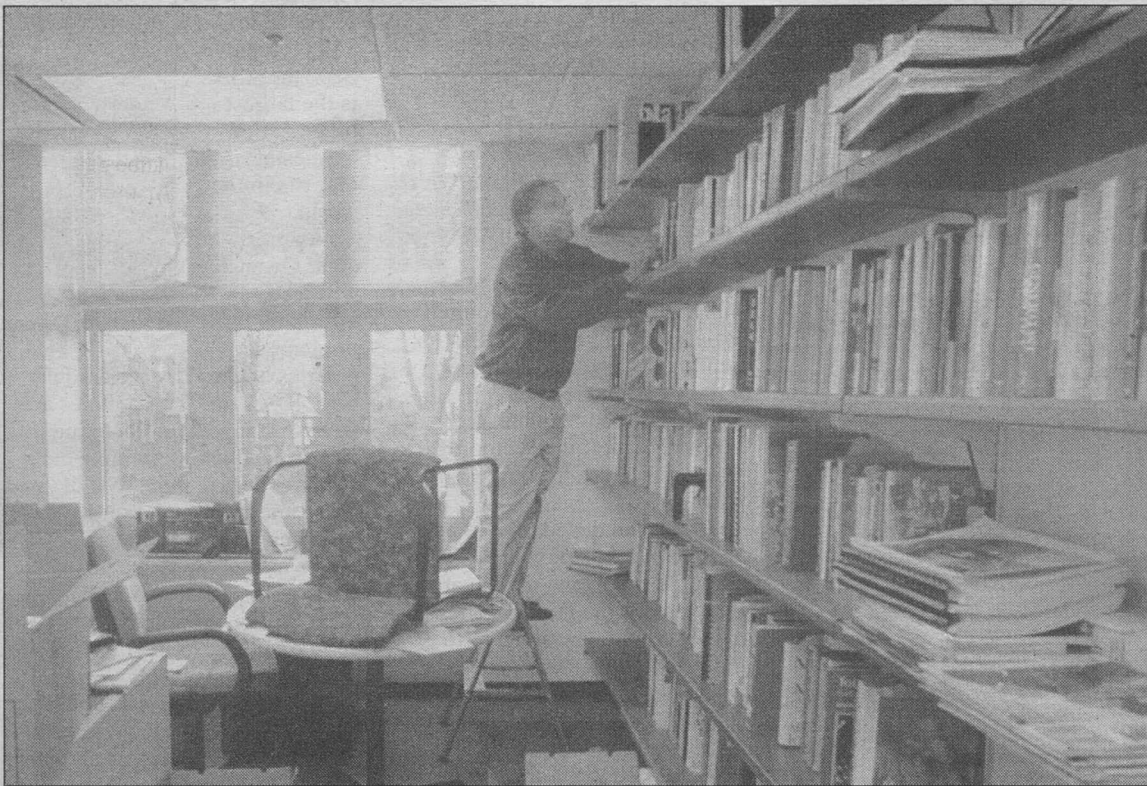
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WASHINGTON
UNIVERSITY
IN ST. LOUIS

Vol. 22 No. 26 April 2, 1998



Creating order from chaos was the task for Robert L. Pierce, Ph.D., associate professor of social work, and colleagues at the George Warren Brown School of Social Work as they settled into their new Goldfarb Hall quarters this spring. The building adjoins the school's Brown Hall.

Moving in

Social work school revels in new building

Construction workers are putting finishing touches on the George Warren Brown School of Social Work's newly constructed Alvin Goldfarb Hall, but the school's faculty, staff and students already are settling into freshly painted offices and classrooms in the red granite structure adjoining Brown Hall.

"The construction of Goldfarb Hall has been a source of great excitement for all of us," said School of Social Work Dean Shanti K. Khinduka, Ph.D. "Now that the building is there and people have moved in, we can focus renewed attention on the school's educational and intellectual priorities."

Noting that the school now has four named chairs for endowed professorships, a substantial num-

ber of scholarships for the master's and doctoral programs and three strong research and education centers, Khinduka described the building as just one component of the school's Project 21 campaign to strengthen its pre-eminent position among the nation's top schools of social work.

"We look forward to continued success in our efforts to support the work of outstanding students, to attract and retain top faculty and to engage in innovative scholarship and research," Khinduka said. "We intend to work even more closely with St. Louis agencies and authorities to improve the quality of life for local residents and to continue the international outreach that already brings George Warren Brown more

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Hilltop campus tackles transportation issues

MetroLink use, van- and carpools are encouraged

With finite space on the Hilltop Campus and St. Louis facing air-quality sanctions from the Environmental Protection Agency (EPA), the University is taking positive steps to encourage fewer vehicles on campus.

"The issue is to reduce parking demand," said Mark Siedband, the University's new transportation management coordinator, who is charged with developing and implementing program initiatives on parking. "We're committed to this."

Through education, financial incentives and commuting options, the University seeks to reduce single-occupancy vehicle use on the Hilltop. The plan would be similar to the popular Transportation Management Association program on the Medical Campus, which has attracted more than 500 participants since its inception in 1996. Proposals under consideration for the Hilltop include

car- and vanpools, parking off campus and use of mass transit.

Car and van pool participants could be offered incentives, such as reduced parking rates, prize drawings and prime parking spaces on campus. A ride home would be guaranteed for any employee who had to leave work early or stay late.

The University is considering an agreement with the City of St. Louis to allow University employees to park in a lot at The Muny in Forest Park. Parking there would be free, and the University would provide shuttle service to and from campus. Security measures would be

provided in the lot, as would emergency transportation from campus to car for anyone needing to leave work unexpectedly. Other off-site parking locations also are being considered.

With the future expansion of MetroLink slated along the northern edge of the Hilltop Campus, the use of public transportation also would be an attractive option for employees.

"We want to lay the groundwork for changing habits," said Steven P. Hoffner, assistant vice chancellor for operations. Changing parking and commuting habits is imperative not only for environmental reasons but for economic ones as well.

Missouri could lose an annual \$400 million in federal highway funds if its air quality is not improved, and EPA sanctions could put the brakes on economic development in the region.

Already, a number of steps have been taken on the Hilltop to increase the availability of parking and reduce demand. Within the last year, the University has re-striped and

Fast facts on Hilltop parking:

Parking spaces: 4,601

Parking permits sold: 4,819

Yellow: 2,996 (1,250 faculty and staff/
1,746 students)

Red: 413

Green: 585

Blue: 277

Brown: 508

Disabled: 40

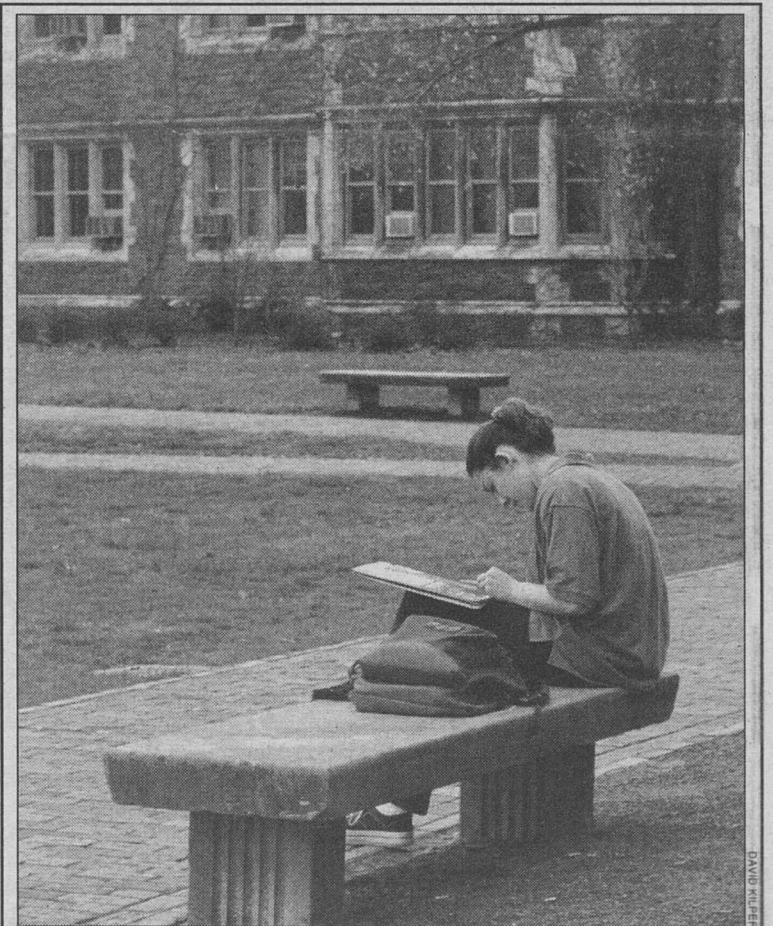
Construction cost per new parking space:

Surface parking: \$2,000-\$3,000

Garage parking: \$10,000-\$12,000

Underground parking: \$15,000-20,000+

Continued on page 6



Ah, spring

Freshman Julie Nebel found inspiration for sketching in Brookings Quadrangle during last week's balmy weather.

New strategies to prevent bone loss could emerge from discovery

When Mae West pronounced that too much of a good thing sometimes is a good thing, she probably didn't have the versatile molecule nitric oxide in mind.

The molecule is found throughout the biomedical world, playing a vital, though often baffling, role in everything from blood pressure to bone

loss to rheumatoid arthritis to male erection.

Now, biologists at Washington University have confirmed the legendary West's observation by showing that a high concentration of nitric oxide in large bone cells called osteoclasts may serve to prevent osteoclasts from eating too much bone away, thus preventing bone loss associated with

diseases such as osteoporosis.

Nitric oxide (NO) is not to be confused with nitrous oxide, or laughing gas. NO was Science magazine's "Molecule of the Year" in 1992, a biochemical poster boy for ambiguous behavior. Like a character in an old Western, at times it wears the good guy's white hat, only to switch and don the villain's black

hat. For instance, human cells produce one form of nitric oxide as a weapon against invading bacteria, but very high concentrations of the molecule can make NO a killer of the very cells that produce it.

Philip Osdoby, Ph.D., professor of biology in Arts and Sciences, and a team including his wife, Patricia Collin-Osdoby, Ph.D., research associate professor of biology, added an antibody they had isolated and developed to osteoclast cells, believing that the antibody would hone in on a target molecule — an antigen — it recognizes in the osteoclasts. The antibody binds to the antigen, interfering with its function. In

testing the antigen/antibody reaction, the biologists found that introducing the antibody into the osteoclasts halted the process of bone resorption — the work of osteoclasts to gnaw away bone when the cells are too active or numerous. This leads to pits in the bone matrix and weakening of bone.

After adding the antibody, biochemical tests revealed that another free radical, superoxide, was elevated, and, following the burst of superoxide production, there was an increase in NO. This was followed by decreases in bone resorption and decreased production of acid phosphatase,

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Kurt Vonnegut and dinosaur expert Jack Horner to give Assembly Series lectures

Medical Update

Richard Gephardt visits Genome Sequencing Center

As Congress gears up for a major budget debate, House Democratic Leader Richard Gephardt (D-Mo.) came to the School of Medicine March 21 to see how funds from the National Institutes of Health (NIH) are being put to work. President Clinton has suggested that part of the current federal budget surplus be used to increase NIH funding. "We are going to try to do even better than the president's numbers," Gephardt said.

The Genome Sequencing Center has \$21 million of the \$170 million the medical school currently receives from the NIH. The largest facility of its kind in the United States, it is participating in the quest to decipher all of human DNA, an international collaboration called the Human Genome Project.

DNA carries the information that guides human development from the time an egg is fertilized to the end of life.

Gephardt spoke at a press conference after touring the center at 4444 Forest Park Ave. "We are very fortunate that a major part of this work is going on here in St. Louis," he said. "This project has enormous implications for health care in America, for science, for biology and for the future of the country."

In response to a reporter's question, Gephardt said he would like to double the NIH's budget. "I am confident after hearing the folks here talk about the project

that they can use additional funding to quicken the pace," Gephardt said. "They hope to have it done by the year 2005. If we're to meet that target, we

have to increase the funding dramatically."

William A. Peck, M.D., vice chancellor for medical affairs and dean of the medical school, also

spoke at the press conference. "In 1997," he said, "Washington University ranked among the top few medical schools in NIH support for research. Our \$170 million in NIH funds supports an enormous effort, a broad portfolio of studies of disease, studies of the basic mechanisms of biology that can lead to disease, efforts to understand normal processes and so forth.

"The ultimate goal is to improve health," he said. "We are privileged at Washington University to play a major role in this effort."

Robert H. Waterston, M.D., Ph.D., the James S. McDonnell Professor, head of the Department of Genetics and director of the Genome Sequencing Center, said the Human Genome Project is developing an infrastructure for the rest of biology.

"If we can decode the human genome over the next eight years," he said, "we will be able to lay out all the human genes and try from there to begin to understand how these genes work in both health and disease. But to do that will require a massive effort. We will need the wholehearted support of the NIH and Congress in order to reach that goal."

Chancellor Mark S. Wrighton and Theodore J. Cicero, Ph.D., vice chancellor for research, also toured the facility with Gephardt.

— Linda Sage



Robert H. Waterston, M.D., Ph.D. (left), director of the Genome Sequencing Center at the School of Medicine, shows House Democratic Leader Richard Gephardt (D-Mo.) how gels are readied for the DNA sequencing machine. Gephardt was in St. Louis March 21 to tour the center and to stress the need for increasing medical research funding through the National Institutes of Health.

Owens to lead anesthesiology organization

William D. Owens, M.D., professor of anesthesiology, has been elected president of the American Society of Anesthesiologists (ASA). With more than 34,000 members, the ASA is the largest organization of anesthesiologists in the world.

As president, Owens will lead efforts to implement policies adopted by the association. This year, such policies are likely to range from lobbying to clarify Medicare reimbursements to better defining the role of nurse anesthetists, he said.

Owens joined the faculty at the School of Medicine in 1973. He served as chair of the Department of Anesthesiology from 1984 to 1992. During this time, he increased his involvement in the ASA at the national level, where he served as the organization's first vice president and chair of numerous committees.

Owens is a past president of the American Board of Anesthesiology, the Foundation for Anesthesia Education and Research, the Academy of Anesthesiology and the Missouri Society of Anesthesiologists. He also has served as associate editor of the medical journal *Survey of Anesthesiology*.

Owens is a diplomate of the American Board of Anesthesiology and a fellow of the American College of Anesthesiologists. He received a medical degree from the University of Michigan School of Medicine in Ann Arbor and completed a residency at Massachusetts General Hospital in Boston.



William D. Owens

Thalachallour Mohanakumar named to Maritz chair

Thalachallour Mohanakumar, Ph.D., has been named to a new chair, the Jacqueline G. and William E. Maritz Chair in Immunology and Oncology in the Department of Surgery at Barnes-Jewish Hospital and Washington University School of Medicine.



Thalachallour Mohanakumar was established through a gift to the Barnes-Jewish Hospital Foundation from Jacqueline G. and William E. Maritz, chief executive officer of Maritz Inc. and a longtime community leader. Their gift honors the work of Joel D. Cooper, M.D., the Evarts A. Graham Professor of Surgery, head

of the Division of Cardiothoracic Surgery and an internationally recognized pioneer in lung surgery, and Shabbir H. Safdar, M.D., professor of medicine and a longtime area physician who specializes in hematology and oncology.

The appointment was announced by Timothy Eberlein, M.D., the Bixby Professor and chair of the surgery department, and Peter L. Slavin, M.D., president of the Barnes-Jewish Hospital Foundation.

"This new appointment is a tribute not only to Dr. Mohanakumar's superb and unique research but also to the partnership of visionary civic leaders Bill and Jackie Maritz with Washington University School of Medicine," said Eberlein. "Their support in this time of cost cutting in health care is vitally important, and it

emphasizes the important role that these partnerships play in the St. Louis community."

Eberlein added that Mohanakumar is the principal investigator on four separate research grants from the National Institutes of Health (NIH). "This is phenomenal because fewer than 1 percent of all NIH investigators have more than two such grants," he said.

Mohanakumar's current research focuses on the structure and function of peptides and their possible role in preventing organ rejection, particularly in kidney and lung transplants. He also is working to define the human immune responses to pig organs, which are being considered as transplant options because suitable human organs are in short

supply. A third area of research is identifying and characterizing peptides that might help in the treatment of breast and lung cancer.

He will continue as Director of Histocompatibility and Immunogenetics as well as director of the Islet Core Facility.

Mohanakumar is active in a number of professional societies, including the American Association for Cancer Research and the American Association for the Advancement of Science. He has been a member of study sections of the American Cancer Society and the American Red Cross and has chaired study sections for the NIH. He also serves as editorial board member of the journals *Transplantation* and *Human Immunology*.

Early events in atherosclerosis focus of Heinecke's study

Jay W. Heinecke, M.D., associate professor of medicine and of molecular biology and pharmacology, received a five-year \$1.3 million grant from the National Institute on Aging to study the link between chemicals produced by white cells and artery wall damage.

"Atherosclerosis is the most common cause of death and disability in the Western world," Heinecke said. "We propose that white cells contribute to this disease by damaging the artery wall with the chemicals they use to kill disease-causing microbes."

Heinecke first suggested this idea in the early 1980s, when he was studying sea urchin eggs. After fertilization, an enzyme weaves proteins into a hard, protective layer around the egg. A similar enzyme is secreted by mammalian white cells called phagocytes, which are abundant in atherosclerotic lesions. Heinecke reasoned that products of this enzyme might link proteins in

blood vessels, hardening the artery wall.

Since Heinecke came to Washington University in 1992, his group has shown that this enzyme, myeloperoxidase, is active in such lesions. By oxidizing amino acids in the blood with peroxide, it forms a battery of corrosive chemicals. Because many of these are ephemeral, the group has developed ways to detect and measure minute quantities of their stable end products.

Using mass spectrometry, the researchers have identified these telltale markers in atherosclerotic lesions. "Some of these compounds are generated only by myeloperoxidase," Heinecke said. "So finding them in atherosclerotic lesions provides strong evidence that the enzyme can damage the artery wall."

In the current project, the group is focusing on damage by chemicals known as aldehydes. During the past few years, Heinecke and

former postdoctoral fellow Stanley L. Hazen, M.D., Ph.D., showed that myeloperoxidase converts several amino acids to large amounts of highly reactive aldehydes. They also found that at least one of these, *para*-hydroxyphenylacetaldehyde (*p*HA), can damage proteins and lipoproteins, including LDL, the lipoprotein associated with heart disease. After it is modified by *p*HA, LDL is rapidly taken up by phagocytic white cells.

"This raises the possibility that a novel receptor on certain phagocytes mediates the uptake and degradation of LDL that has been oxidized by aldehyde," Heinecke said.

This possibility is exciting, Heinecke said, because LDL must be oxidized to cause atherosclerosis. Oxidation by aldehydes could provide a mechanism, which so far has remained elusive. By generating aldehydes, myeloperoxidase also could contribute to the formation of brown, fluorescent com-

pounds called advanced glycation end products, which have been implicated in aging and diabetes.

The new grant will allow Heinecke's group to identify additional aldehydes that phagocytes make from amino acids. To find out whether they are produced in the body, the researchers will measure their levels in pus and atherosclerotic tissue. In the third phase of the research, they will study mice that are deficient in myeloperoxidase — and therefore myeloperoxidase-derived chemicals. This part of the study will allow them to assess the contribution of aldehydes to artery wall damage. Finally, they will explore the idea that phagocytes possess a novel receptor for LDL modified by *p*HA. "Such a receptor might contribute to atherosclerosis," Heinecke said, "by promoting unregulated uptake of LDL and cholesterol into the artery wall."

— Linda Sage

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Record (USPS 600-430; ISSN 1043-0520), Volume 22, Number 26/April 2, 1998. Published for the faculty, staff and friends of Washington University. Produced weekly during the school year, except school holidays, and monthly during June, July and August by the Office of Public Affairs, Washington University, Campus Box 1070, One Brookings Drive, St. Louis, MO, 63130. Periodicals postage paid at St. Louis, Mo.

Address changes and corrections:

Postmaster and non-employees: Send to Record, Washington University, Campus Box 1070, One Brookings Drive, St. Louis, MO, 63130.

Hilltop Campus employees: Send to Office of Human Resources, Washington University, Campus Box 1184, One Brookings Drive, St. Louis, MO, 63130.

Medical Campus employees: Send to Payroll Office, Washington University, Campus Box 8017, 660 S. Euclid Ave., St. Louis, MO, 63110.

Electronic Record: To view the Record on the World Wide Web, go to <http://wupa.wustl.edu/record/record.html>

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Washington People

Powderly travels rough road toward AIDS cure

William Powderly, M.D., knows a cure for AIDS will not come in the form of a breakthrough, sudden and revolutionary. Instead, scientists will hobble toward success: a step here, a step there, humbled by the setbacks, grateful for the gains.

"It's a rough road," Powderly said. "A rough, wonderful, humanizing road."

Powderly, a professor of medicine, has served as co-director of the Division of Infectious Diseases and director of the School of Medicine's AIDS Clinical Trials Unit (ACTU) since its inception in 1987. Supported by the National Institutes of Health, the unit is one of 28 across the country that conducts clinical research trials of potential treatments for HIV, the virus that causes AIDS, and their complications. The scientific community uses clinical trials to find out if a drug works and if it's safe. In essence, the units are a testing ground for drugs that may — or may not — be made widely available later.

For people with HIV, participating in studies is a risky endeavor that comes with few guarantees but a lot of hope. For Powderly, overseeing such studies is the most humbling experience of his career. "It's changed my life in so many ways," he said.

When the trials first started, the world erroneously believed AIDS was a fleeting "gay man's disease," though it's true most of the 50 patients Powderly's staff saw that year were male and homosexual. Now, however, the trials enroll between 150 and 200 participants a year, and they represent all segments of the population. The studies' rosters are limited only by resources, Powderly said, and not because of a lack of potential volunteers. At any one time, the ACTU staff juggles 20 to 25 different studies. A separate HIV clinic treats between 500 and 600 patients a year.

Patients come from across the Midwest to receive the free treatments and drugs the study provides, Powderly said. As a native Irishman — he was born in Limerick and educated in Dublin — he has grown to appreciate the polite skepticism with which Midwesterners approach the studies. It is, after all, a gamble, so Powderly is sympathetic to leery patients.

"If we knew the answers, we wouldn't be doing these studies," he observed. "So there is an element of risk because one treatment may be inferior and someone is getting that treatment. The truth is, some people have not benefited; some even have potentially been harmed. It's one reason why I admire the participants so much."

"The big motivation for enrolling is, of course, hope for self, maybe even a little expectation," he added. "But do you know what we always hear — and I believe them — we always hear, 'If this doesn't help me, I just hope it helps someone else.'"

Real help for people with HIV

In fact, the clinic has helped scores of people with HIV. Some 2,000 have participated in one study or another here, and the medical school's unit is considered one of the best in the country, said Charles Vanderhorst, M.D., professor of medicine at the University of North Carolina.

So well regarded is Powderly that he has emerged as a key player in designing AIDS clinical trials for the National Institutes of Health. "He's helped put Washington University in the limelight for AIDS research," Vanderhorst said. "He has all the traits of a great clinician. He's patient, methodical. He doesn't get lost in the trees. He's also willing to listen."

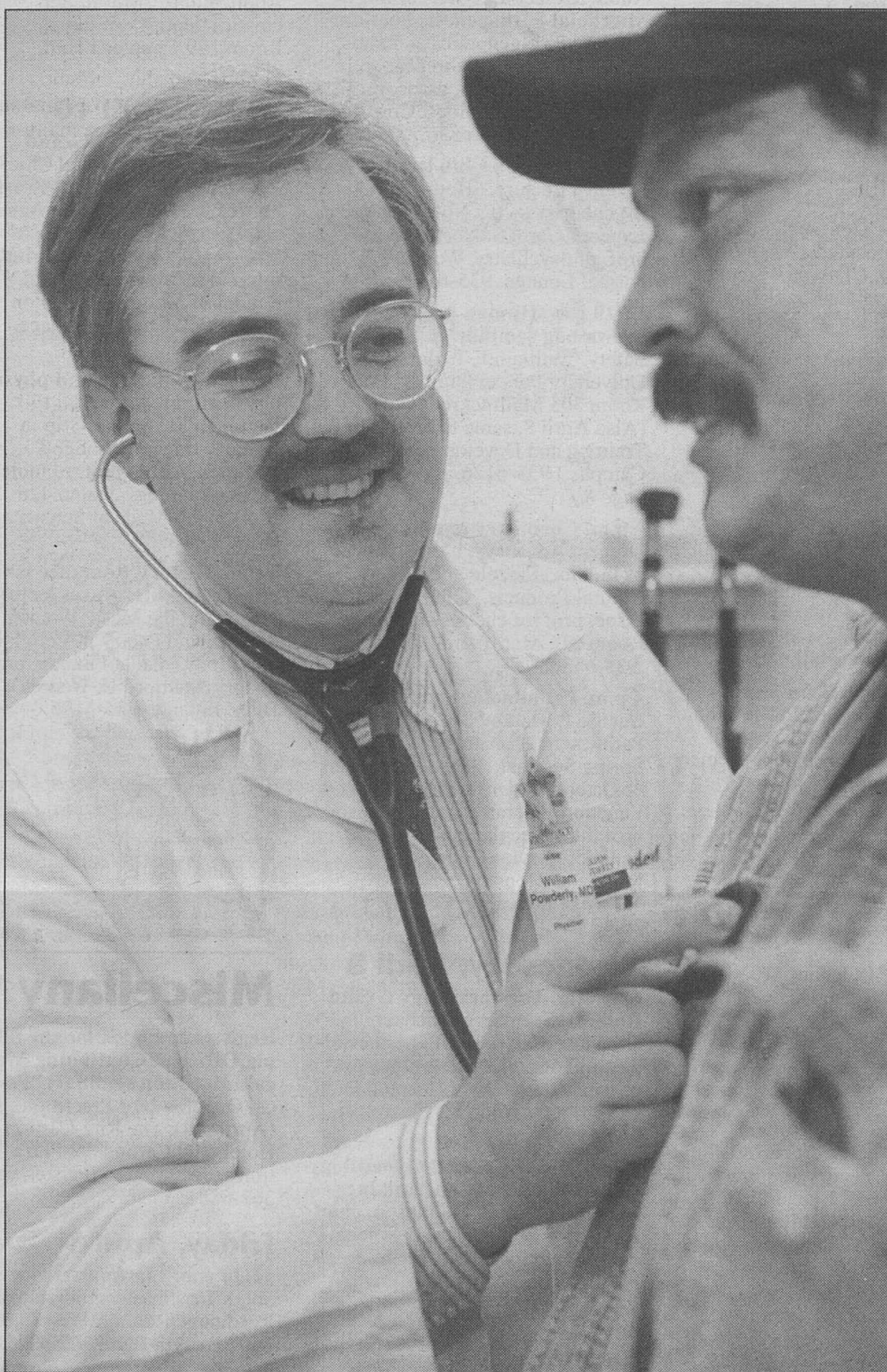
His willingness to listen also has made Powderly revered among people with HIV and their caregivers, said Allegra Cermak, a member of the unit's Community Advisory Board. The board serves as a link between the unit and community groups that work with people who are HIV-positive.

Cermak is a member of ACT UP, an AIDS activist organization whose aggressive tactics are sometimes shunned by more mainstream AIDS groups. In fact, Cermak said, most other clinical trials units across the country do not have an ACT UP representative sitting on their community boards.

"We're the envy of other community boards because they know Dr. Powderly will answer our questions and talk to us," said Cermak, who also serves as the chairperson of the national group of community advisory boards. "He was very supportive of having an ACT UP member on the board. Our goals are the same, really, to

get information about clinical trials to people quickly and in a way they can understand."

In the epidemic's early years, success was an elusive goal. "So many of our earliest volunteers are dead," Powderly said. But in the last three years, there has been a profound change in battling HIV, and clinical trials units across the country have been instrumental in the victory.



William Powderly, M.D., examines patient Scott Johnson. His patients, Powderly says, have taught him much about bravery, tolerance and understanding.

From late 1994 to early 1995, the units began testing protease inhibitors in combinations commonly called "cocktails."

In part, protease inhibitors prevent the virus from replicating. The drugs are so powerful, Powderly said, that in about 80 percent of users, the level of virus in the blood is no longer detectable.

When word of the drugs' success began leaking out of the nation's clinical trials units, the AIDS community was

"He's helped put Washington University in the limelight for AIDS research. He has all the traits of a great clinician."

— Charles Vanderhorst

euphoric. It was the first sign of real hope since the epidemic began.

"The response is dramatic," Powderly said. "People who were on death's door two years ago are now working, living full, productive lives."

Still, Powderly cautioned, "We're not out of the woods yet."

For one, the drugs pose problems. They demand a difficult regimen — three to four pills taken three to four

times a day. Sticking to the regimen is extremely challenging. "Think of it this way: When antibiotics are prescribed, how many people finish them?" Powderly asked. The drugs also cause side effects, including chronic diarrhea and cramping, that can inhibit daily activities.

Nonetheless, the drugs have opened the door to a new area of study, whose pursuit Powderly considers a luxury: examining long-term survival rates on the drugs. For example, the unit is now looking at other diseases the drugs may cause — high triglycerides and diabetes — and how those affect long-term survival.

"It's just wonderful to be looking at this now," he said. "What's really incredible is that we've gotten here sooner than I ever thought."

Yet Powderly hopes for more. "Very early on, I met with community activists and told them my ultimate goal would be to shut down the unit, and I think we may still do that," he said.

Powderly credits his staff with the unit's success. "They are among the unsung heroes," he said.

For their part, his staff credits Powderly's determination and compassion with helping guide them through work that even on a good day can be sad. "He is always thinking about the patient's care," said Mike Klebert, study coordinator for the ACTU and a member of Powderly's staff since 1988. And, Klebert added, he does so on all levels, from helping an individual get needed care to eliminating needless federal bureaucracy.

"He's outspoken, too," Klebert said. "He's not afraid to speak his mind. I've seen him get impatient with the bureaucracy that encumbers us. He gets red-faced and blustery, and it's all for the patients."

Powderly came to the United States in 1983 as a fellow in the medical school's infectious diseases division. He never intended to stay in this country, but now, 15 years later, he has a wife, two children and a rewarding and successful career. Still, he believes he gives back to Ireland in some way. A number of fellows have come from Ireland to study under him, then returned.

He began his clinical research by studying fungal infections in immune-compromised patients, such as cancer patients. When AIDS came on the scene, he shifted his focus.

"The disease has affected a whole generation of doctors," he said. "When I was a resident, the idea of a fatal infectious disease killing people in their 20s and 30s because of an infection was totally foreign. We had no concept. Then a few years later it happened. It raised the issue of our own mortality."

Lessons in bravery and humility

In a word, the experience has been humbling. Of his early patients who died, he said: "You think about them as you celebrate the successes of today. How can you not? But this illness has taught me some very important lessons. I've seen bravery. I've learned a lot about tolerance, about understanding people."

Powderly remembers one patient, in particular, whose life and death represented a turning point in how he dealt with patients. In 1988, still in the disease's early years, a Clayton lawyer came to the clinic. He was young, like Powderly, somewhere in his mid-30s, and he was an Irish American, born in Boston and transplanted to the Midwest.

His defense in dealing with the disease was to shock people about his homosexuality, Powderly said. "He was very hard to deal with at first, then he finally opened up," he recalled.

The patient joined one of the trials and got painful side effects so debilitating he had to quit work. He remained, in Powderly's eyes, brave and stoic. He told Powderly that if he was going to die, he wanted to die at home in Boston near his parents. But a week before moving, he developed a brain infection that spread quickly. Despite Powderly's best efforts to have the man transported to a Boston hospital, he died in St. Louis, away from home and without family.

"It was enormously frustrating and sad for me," Powderly said. "In the end, I felt like I failed him. But it made me more determined to find out from patients, early on, what they really want. His death was a turning point for me."

Powderly said his death and the countless others have helped him recognize the humanity in everyone. "One thing I've learned is that when we're facing death, we're not that much different from one another."

— Nancy Mays

Calendar

Visit Washington University's on-line calendar at
<http://cf6000.wustl.edu/calendar/events/v1.1>

April 2-11



Exhibitions

"Art of the '80s: Modern to Postmodern." Through April 5. Upper gallery, Gallery of Art. 935-4523.

"Powerful Grace Lies in Herbs and Plants: A Joint Exhibit on Herbal Medicine." Sponsored by Missouri Botanical Garden Library and Bernard Becker Medical Library. Through August. Seventh floor, Bernard Becker Medical Library, 660 S. Euclid. 362-4235.

Selections from the Washington University art collections. Through April 5. Lower galleries, Gallery of Art. 935-4523.

"The Book Arts in St. Louis: 1898 to 1998." Through May 22. Special Collections, level five, Olin Library. 935-5495.



Films

Thursday, April 2

7:45 p.m. French and Francophone Film Series. "Delicatessen" (1991). Room 162 McDonnell Hall. 935-5175.

Friday, April 3

7 and 9:30 p.m. Filmboard Feature Series. "The Full Monty." (Also April 4, same times, and April 5, 7 p.m.) Cost: \$3 first visit; \$2 subsequent visits. Room 100 Brown Hall. 935-5983.

Midnight. Filmboard Midnight Series. "Thelma & Louise." (Also April 4, same time, and April 5, 9:30 p.m.) Cost: \$3 first visit; \$2 subsequent visits. Room 100 Brown Hall. 935-5983.

Tuesday, April 7

7 and 9 p.m. Filmboard Foreign and Classic Series. "Slaughterhouse-Five." (Also April 8 and 9, same times.) Cost: \$3 first visit; \$2 subsequent visits. Room 100 Brown Hall. 935-5983.

Wednesday, April 8

6 p.m. Chinese Film Series. "Eat Drink Man Woman" (1994). Room 219 Ridgley Hall. 935-5156.

Thursday, April 9

7:45 p.m. French and Francophone Film Series. "La Haine" (1995). Room 162 McDonnell Hall. 935-5175.

Friday, April 10

7 and 9:30 p.m. Filmboard Feature Series. "Much Ado About Nothing." (Also April 11, same times, and April 12, 7 p.m.) Cost: \$3 first visit; \$2 subsequent visits. Room 100 Brown Hall. 935-5983.



Lectures

Thursday, April 2

Noon. Genetics seminar. "Large Families of Chemoreceptor Genes: What They Tell Us About the Nematode Genome." Hugh

Robertson, U. of Ill.-Urbana-Champaign. Room 823 Genetics Library, McDonnell Medical Sciences Bldg. 362-7076.

1:10 p.m. Social Work Spring Seminar Series. "Managed Care: Problem or Panacea." King Davis, prof. of social policy, Virginia Commonwealth U., Richmond. Brown Hall Lounge. 935-7453. (See story on page 5.)

4 p.m. Biology seminar. "Natural Selection on Plasticity and Performance in Variable Environments." Joel Kingsolver, zoology dept., U. of Wash.-Seattle. Sponsored by the Graduate Program in Evolution and Population Biology. Room 322 Rebstock Hall. 935-7256.

4 p.m. Cancer Center Seminar Series. "Thymocyte Lineage Commitment: CD4; CD8; 86." Stephen Hedrick, Cancer Center, School of Medicine, UC-San Diego. Third Floor Aud., St. Louis Children's Hospital. 747-0359.

4 p.m. Chemistry seminar. "Tailored Porous Metal-Organic Materials." Omar Yaghi, asst. prof. of chemistry, Ariz. State U. Room 311 McMillen Lab. 935-6530.

4 p.m. Earth and planetary sciences colloquium. "Dating Topographic Uplift of the Sierra Nevada, California, Using Apatite (U-Th)/He Ages." Martha House, asst. prof. of geology, SLU. Room 112 Wilson Hall. 935-5610.

4 p.m. Joint Center for East Asian Studies lecture. "The Ethnic Nation and the Political State in Modern Japan: Dimensions of an East Asian Problem." Kevin M. Doak, assoc. prof. of modern Japanese history, U. of Ill.-Urbana-Champaign. Room 30 January Hall. 935-4448.

4:15 p.m. Philosophy colloquium. "Reflections on Moral Psychology." Michael Stocker, prof. of philosophy, Syracuse U. Room 110 January Hall. 935-6640.

4:30 p.m. Mathematics colloquium. Speaker is Almut Burchard, prof. of mathematics, Princeton U. Room 199 Cupples I Hall. 935-6748.

7:30 p.m. American Indian Awareness Week lecture. "Cultural Displacement Theory and Practice Among American Indians." Steve Byers. Room 246 Goldfarb Hall. 935-4510. (See story on this page.)

Friday, April 3

9:15 a.m. Pediatric Grand Rounds. "Systemic Hypertension in Children: No Time to Relax." Mark C. Johnson, asst. prof. of pediatrics, Clopton Aud., 4950 Children's Place. 454-6006.

Noon. Cell biology and physiology seminar. "Cadherins and Catenins in Signaling and Morphogenesis." Barry Gumbiner, Memorial Sloan-Kettering Cancer Center, NY. Room 426 McDonnell Medical Sciences Bldg. 362-3964.

6 and 8:30 p.m. WU Association Travel Lecture Series. "Wales — In Spirit and Song." Bob Willis. Cost: \$4.50. Graham Chapel. 935-5212.

Monday, April 6

Noon. Molecular biology and pharmacology seminar. "Genetic Control of Osteogenesis." Gerard Karsenty, assoc. prof. of molecular and human genetics, Baylor College of Medicine, Houston. Cori Aud., 4565 McKinley Ave. 362-2725.

3 p.m. Mathematics analysis seminar. "The Marcinkiewicz Interpolation Theorem Revisited; Applications to Multilinear Operators." Loukas Grafakos, mathematics dept., UM-Columbia. Room 199 Cupples I Hall. 935-6760.

4 p.m. Immunology Research Seminar Series. "The Self Peptide Ligands for Positive Selection of CD8 T Cells." Kristin A. Hogquist, laboratory medicine and pathology dept., U. of Minn.-Minneapolis. Eric P. Newman Education Center. 362-2763.

4 p.m. Joint Center for East Asian Studies/Taiwan Studies

Group in St. Louis lecture. "The Role of Elections in the Democratization of Taiwan." John F. Cooper, the Stanley J. Buckman Distinguished Professor of International Studies, Rhodes College, Memphis, Tenn. Room 30 January Hall. 935-4448.

Tuesday, April 7

Noon. Molecular Microbiology/Microbial Pathogenesis Seminar Series. "Post-genomics and Pathogenesis in Group A Streptococci." Michael G. Caparon, assoc. prof. of molecular microbiology, Cori Aud., 4565 McKinley Ave. 362-8873.

Noon. Woman's Club lecture. 21st Century Lecture. "How I Became a Psychiatrist — It's Not What You'd Expect." Carol S. North, assoc. prof. of psychiatry, Women's Bldg. Formal Lounge. 935-5151.

12:10 p.m. Human resources brown bag seminar. "Campus Safety." William F. Taylor, dir., University Police. Lambert Lounge, Room 303 Mallinckrodt Center. (Also April 8, same time, Room B Training and Development, West Campus.) 935-6126. (See story on page 8.)

4 p.m. Chemistry seminar. "Recent Advances in the Synthesis of Indolocarbazole and Indole Natural Products." John Wood, assoc. prof. of chemistry, Yale U. Room 311 McMillen Lab. 935-6530.

4 p.m. Pathobiology seminar. Lucille P. Markey Special Emphasis Pathway in Human Pathobiology Spring Seminar. "Genetic Analysis of Osteoblast Differentiation and Function." Gerard Karsenty, assoc. prof. of molecular and human genetics, Baylor College of Medicine, Houston. Eric P. Newman Education Center. 362-3364.

Wednesday, April 8

6:30 a.m. Anesthesiology Grand Rounds. Speaker is Michael Crowder, asst. prof. of anesthesiology and of molecular biology and pharmacology, Wohl Hospital Bldg. Aud., 4960 Children's Place. 362-6978.

8 a.m. Obstetrics and Gynecology Grand Rounds. "Cancer in Pregnancy." Jeffrey B. Thompson, chief resident in obstetrics and gynecology, Clopton Aud., 4950 Children's Place. 362-7139.

11 a.m. Assembly Series lecture. Phi Beta Kappa/Sigma Xi Lecture. "Dinosaurs and the History of Evolutionary Thought." Jack Horner, curator of paleontology, Museum of the Rockies, Bozeman, Mont. Graham Chapel. 935-5285. (See story on page 5.)

3:30 p.m. Center for the Study of American Business/economics seminar. "Perfect Predictions in Economic Dynamic Systems with Random Perturbations." Volker Böhm, U. of Bielefeld, Germany. Room 300 Eliot Hall. 935-5658.

4 p.m. Biochemistry and molecular biophysics seminar. "Structural Energetics of Serine Protease Inhibition." Kenneth P. Murphy, asst. prof. of biochemistry, U. of Iowa. Cori Aud., 4565 McKinley Ave. 362-0261.

Thursday, April 9

Noon. Genetics seminar. "Arthropod Morphology and the Evolution of Gene Regulatory Circuits." Lisa Nagy, molecular and cell biology dept., U. of Ariz. Room 823 Genetics Library, McDonnell Medical Sciences Bldg. 362-7076.

4 p.m. Assembly Series lecture. CHIMES and Neureuther Library Lecture. Speaker is author Kurt Vonnegut. Graham Chapel. 935-5285. (See story on page 5.)

4 p.m. Chemistry seminar. Marcus Lecture. "Advances in Drug Delivery Systems and Tissue Engineering." Robert Langer, prof. of chemical and biomedical engineering, MIT. Room 458 Louderman Hall. 935-6530.

4 p.m. Earth and planetary sciences colloquium. "Geology

and Geophysics of the Highbury Impact Structure, Zimbabwe: A Deeply Eroded Precambrian Astrobleme in a Paleoproterozoic Mobile Belt." Sharad Master, Harvard U. and the U. of the Witwatersrand. Room 112 Wilson Hall. 935-5610.

4:30 p.m. Mathematics colloquium. "Non-linear Balayage and Applications." Murali Rao, mathematics dept., U. of Fla. Room 199 Cupples I Hall. 935-6771.

Friday, April 10

9:15 a.m. Pediatric Grand Rounds. Second annual Chief Residents' Visiting Professorship. "Influence of Disease on American History." Theodore E. Woodward, professor emeritus of internal medicine, U. of Md. School of Medicine. Clopton Aud., 4950 Children's Place. 454-6006.

Noon. Cell biology and physiology seminar. "Bacterial Pili: Getting a Molecular Grip in Bladder Infections." Scott J. Hultgren, assoc. prof. of molecular microbiology, Room 426 McDonnell Medical Sciences Bldg. 935-6950.

3 p.m. History/Romance languages and literatures lecture. "Resisting the Muse: Women, Science and Poetry in Enlightenment Italy." Paula Findlen, prof. of history, Stanford U. Women's Bldg. Lounge. 935-5175.



Miscellany

Registration open for the following Office of Continuing Medical Education seminar: "Practical Oncology for Practitioners" (April 3-4), The Ritz-Carlton Hotel, 100 Carondelet Plaza. For times, costs and to register, call 362-6891.

Friday, April 3

11:30 a.m. Toastmasters meeting. WU's Toastmasters for Oratorical Readiness. Room A West Campus, 7507 Forsyth Blvd. 362-4925.

4 p.m. Writing Program fiction reading. Joe Rossi, fellow in fiction, and Julia Hanna, asst. dir., Writing Program. Hurst Lounge, Duncker Hall. 935-7130.

Saturday, April 4

9:30 a.m. Saturday workshop. "Heat Transfer Imaging." Transfer color photocopies to paper and cloth with CLC paper. Cost: \$40. 935-4643.

1-10 p.m. American Indian Awareness Week event. Eighth annual pow wow. Field House, Athletic Complex. 935-4510. (See story on this page.)

American Indian Awareness Week pow wow celebration planned

An American Indian pow wow celebration Saturday, April 4, will conclude activities planned for the University's observance of American Indian Awareness Week, March 30-April 4. The eighth annual pow wow, from 1 to 10 p.m. in the Field House, will feature American Indian dancers, trading booths, music and food. Gourd dancing; blanket dancing; inter-tribal dance contests; and flag, honor and memorial songs will be highlights of the event.

American Indian Awareness Week is hosted by the Kathryn M. Buder Center for American Indian

1 p.m. Saturday workshop. "About Metro Trap." D.B. Dowd talks about creating his Saturday satire for the Post. 935-4643.

Sunday, April 5

11 a.m. and 9 p.m. Catholic Holy Week events. Palm Sunday Mass. (Events continue through April 12.) Catholic Student Center, 6352 Forsyth Blvd. 725-3358.

Monday, April 6

2 p.m. University College short course. "Opera '98: Tales of Youth Restored and Abandoned Love at Opera Theatre." (Continues Mondays through April 27.) Hugh Macdonald, chair and the Avis Blewett Professor of Music, and Sue Taylor, lecturer in music. Cost: \$80. 935-6788.

Tuesday, April 7

8 p.m. International Writers Center Reading Series. Jamaican-born novelist Patricia Powell, the Briggs-Copeland Lecturer in Fiction at Harvard U., will read from her works. Cost: \$5; free for students and senior citizens. West Campus Conference Center, 7425 Forsyth Blvd. 935-5576. (See story on page 5.)

Wednesday, April 8

7 p.m. Writing Center workshop. "Writing and Application Essay for Graduate or Professional School." Staff Conference Room, fourth floor, Olin Library. To register, call 935-4981.

Thursday, April 9

9:30 a.m. - 3:30 p.m. Electronic products demonstration. "The E Files: The Answer is Out There." Sponsored by Bernard Becker Medical Library. Library Atrium, Bernard Becker Medical Library. 362-7085.

1 p.m. Writing Center workshop. "Writing a Resume." Presented in collaboration with the Career Center. Room 252 Olin Library. To register, call 935-4981.

8 p.m. Writing Program fiction reading. Author Lynne Sharon Schwartz, visiting writer in residence, will read from her novel in progress. Hurst Lounge, Duncker Hall. 935-7130.



Performances

Friday, April 3

8 p.m. Performing arts dept. performance. "Machinal." St. Louis premiere of Sophie Treadwell's 1928 play. (Also April 4, same time, and April 5, 2 p.m.) Cost: \$10; \$7 for faculty, staff, students and senior citizens. Edison Theatre. 935-6543.

Studies at the George Warren Brown School of Social Work.

Other events in the observance include:

- Thursday, April 2 — "Cultural Displacement Theory and Practice Among American Indians," a lecture by Cherokee guest lecturer Steve Byers at 7:30 p.m. in Room 246 Goldfarb Hall;
- Friday, April 3 — A T-shirt and bake sale to raise funds for Buder Center activities, 9:30 a.m. to 1 p.m. at the Brown Movie Counter, Brown Hall.

All activities are free and open to the public. For information, call 935-4510.

Dinosaur expert to speak on evolutionary thought

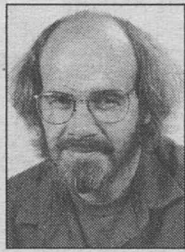
Paleontologist and dinosaur expert Jack Horner, whose numerous distinctions include serving as technical adviser to director Steven Spielberg for the movies "Jurassic Park" and "The Lost World," will deliver the annual Phi Beta Kappa/Sigma Xi Lecture, titled "Dinosaurs and the History of Evolutionary Thought," at 11 a.m. Wednesday, April 8, in Graham Chapel. The Assembly Series lecture is free and open to the public.

Horner discovered the first dinosaur eggs in the Western hemisphere, the first evidence of dinosaur colonial nesting, the first evidence of parental care among dinosaurs and the first dinosaur embryos.

Horner is curator of paleontology at the Museum of the Rockies in Bozeman, Mont. His research covers a wide range of topics about dinosaurs, including their behavior, physiology, ecology and evolution, and has been the subject of two video documentaries by Nova.

He has written more than 40 professional papers and 25 popular articles and is the co-author of

five books, including "Digging Up Tyrannosaurus Rex," "Maia" and "A Dinosaur Grows Up." He has received 18 grants since 1982 from organizations including the National Science Foundation, National Geographic Society and the Turner Foundation. In 1986, Horner was awarded the prestigious MacArthur Fellowship, often referred to as the "genius grant."



Jack Horner

Horner does not hold a formal college degree. He studied geology and zoology at the University of Montana from 1964 to 1966 and from 1968 to 1972. He currently serves as an adjunct professor of geology and biology at Montana State University. Before joining the Museum of the Rockies, Horner served as assistant curator of paleontology at Princeton University's Department of Geological Sciences.

For more information, call 935-5285.



Work in progress

David Mallioux (left) and Leo Schroeder of the contracting firm McGrath and Associates work to reinforce an upper floor in preparation for removing interior walls in a gutted Eads Hall, which is undergoing renovation to convert it to a teaching and learning center, slated for completion next fall.

Is managed care problem or panacea? Social work lecture planned for April 2

"Managed Care: Problem or Panacea?" is the topic of a lecture by social policy expert King Davis at 1:10 p.m. April 2 in Brown Lounge of the George Warren Brown School of Social Work.

Davis, a professor of social policy since 1984 at Virginia Commonwealth University in Richmond, is a respected expert on social issues related to mental health, fund raising and volunteerism in black communities. He has extensive experience in the administration of government social programs, including four years (1990-94) coordinating mental health and substance abuse programs as a commissioner of the Virginia Department of Mental Health.

As a commissioner, Davis was responsible for executive leadership of a statewide behavioral health care system comprised of 15 facilities and 40 local community service agencies. He managed 17,000 employees and an annual budget of \$700 million and provided services annually to more than 270,000 consumers.

From 1985 until 1987, he held an academic chair within the mental health department, serving as a Galt Scholar in Public Mental Health, a position in which he developed strategies and made

recommendations for increasing cooperation between universities and public health systems. As Virginia's Director of Community Mental Health from 1971 until 1975, he managed 36 state-operated mental health clinics.

Davis earned a bachelor's degree in social work in 1964 and a master of social work in 1966, both from California State University in Fresno. He earned a doctorate in 1971 from the Florence Heller School for Advanced Study in Social Welfare at Brandeis University in Waltham, Mass.

He is a member of the editorial board for the journal Health and Social Work and chair of the Faculty Affairs Committee for the School of Social Work at Virginia Commonwealth University. He has served as a board member for the Center for Public Policy at Virginia Commonwealth University, the Virginia Center for Rural Mental Health at the University of Virginia and the Governor's Council on Alcohol and Drug Abuse on University Campuses.

The lecture is free and open to the public. For more information, call 935-7453.

'Major voice' from Caribbean to read from works at writers center event

Jamaican-born writer Patricia Powell will read from her works at 8 p.m. Tuesday, April 7, at the West Campus Conference Center as part of the International Writers Center's 1997-98 Reading Series.

Powell's first novel, "Me Dying Trial," published in 1993, was written while she was an undergraduate. About this novel, Tony Gibbs wrote in the magazine Islands that "Powell handles her large canvas with enviable skill, bringing the many characters to vibrant life and making us

care deeply about their development. Behind them gradually emerges a clear picture of the rural Jamaica that was."

Her second novel, "A Small Gathering of Bones," was published a year later. "In this brief but powerful work," Adele S. Newson wrote in World Literature Today, "Patricia Powell's genius shines through. From character nuances to narrative technique, she has established herself as a major voice in Caribbean literature." Powell's third novel, "The Pagoda," is forthcoming in the fall from Knopf.

Powell emigrated to the United States in 1982. She earned a bachelor's degree in English in 1988 from Wellesley College with departmental honors for "Me Dying Trial." She received a master's degree in creative writing in 1991 from Brown University. From 1991 to 1997 she taught at the University of Massachusetts at Boston. She is currently the Briggs-Copeland Lecturer in Fiction at Harvard University.

The awards and honors Powell has won include a P.E.N. New England Discovery Award, a Bruce Rossley Literary Award, a Yaddo Fellowship in 1993 and in 1996, and a MacDowell Fellowship in 1992 and in 1997.

Powell will be introduced by Benjamin Taylor, Ph.D., adjunct associate professor and writer in residence in the Department of English in Arts and Sciences. Admission is \$5, free for students with valid identification and for senior citizens. Arts & Education Council cardholders receive a two-for-one discount.

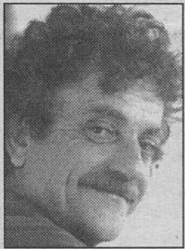
This is the fourth and final reading in the fifth season of the International Writers Center Reading Series. The series is underwritten by the Lannan Foundation and Mary and Max Wisgerhof.

For more information, call 935-5576.

Vonnegut to give lecture

Author Kurt Vonnegut will deliver the CHIMES and Neureuther Library Lecture at 4 p.m. Thursday, April 9, in Graham Chapel as part of the Assembly Series. The lecture is free, but public seating will be limited.

Vonnegut has been a major figure in modern American literature since the 1950s. He has written nearly 20 books and is the creator of such characters as Kilgore Trout, a quirky and little-known science-fiction writer; Eliot



Kurt Vonnegut

Rosewater, an altruistic millionaire; and Billy Pilgrim, a wanderer through time.

Vonnegut's novels include "Mother Night," recently made into a film; "God Bless You, Mr. Rosewater"; and "Slaughterhouse-Five." According to Vonnegut, the recently published "Timequake" will be his final book.

Vonnegut grew up in Indianapolis and frequently refers to the city in his novels. He attended Cornell University as an undergraduate, where he wrote a column for the student newspaper Cornell Daily Sun. In 1943, he left the university to volunteer for military service, and in 1945, as a prisoner of war, he survived the Allied bombing of Dresden that took the lives of 135,000 people.

The Neureuther Library Lecture was made possible through the generosity of Carl Neureuther. Neureuther was an advocate of lifelong reading and the pursuit of book collecting.

CHIMES, the Junior Leadership Honorary, includes 13 students selected for leadership, scholarship and service. In addition to publishing Ternion, the University's telephone directory, CHIMES members annually sponsor an Assembly Series lecture and the Savor St. Louis food festival.

For more information, call 935-5285.

Sports

Compiled by Mike Wolf, asst. athletic director for media relations, and Kevin Bergquist, asst. director, sports information. For up-to-date news about Washington University's athletics program, access the Bears' Web site at rescomp.wustl.edu/~athletics/.

Men's tennis takes Wheaton crown

Extending its winning streak to five matches, the men's tennis team captured the inaugural Wheaton College Jack Swartz Invitational crown with victories over Lake Forest College (6-1) and the host school (5-2). Senior Trent Patterson, the Bears' No. 1 singles player, was named the tourney's Most Valuable Player. The Bears also won matches against Saint Louis University (5-2) and Augustana College (9-0).

Current Record: 11-3

This Week: 3 p.m. Friday, April 3, at Illinois Wesleyan University, Bloomington, Ill.; and at the Tao Tennis Center: 10 a.m. Saturday, April 4, vs. University of Missouri-Rolla; 10 a.m. Sunday, April 5, vs. Nebraska Wesleyan University; 5 p.m. Monday, April 6, vs. Principia College.

Baseball wins four

The baseball Bears returned to action after an eight-day hiatus, winning four of five games. The week was highlighted by a no-hit performance from sophomore pitcher Ryan Stack. The Bears won that contest 12-2 over Milwaukee School of Engineering (MSOE). Washington U. also won contests against Hamline University (9-4), Benedictine University (9-7) and a second victory over MSOE (12-7). The Bears' only defeat was an 8-3 loss to sixth-ranked Carthage College.

This Week: 1 p.m. Friday, April 3, vs. Greenville College (2); 12:30 p.m. Saturday, April 4, vs. Eureka College; 3 p.m. Saturday, April 4, vs. Illinois College; 8:15 a.m. Sunday, April 5, vs. Eureka College; 1:15 p.m. Sunday, April 5, vs. DePauw University. All games will be held at Kelly Field.

Women runners set three new records

After setting school records in 18 of 21 events during the indoor season, the women's track and field team wasted little time working on the outdoor record book. Competing Friday, March 27, in their own Washington U. Mini Meet, the Bears set three more school records. Junior sprinter Claudine Rigaud won the 100-meter hurdles with a provisional qualifying and school record time of 15.13 seconds. Fellow junior Eileen McAllister finished fourth in the 1,500 meters, but registered a provisional time and school record 4 minutes, 44.32 seconds. Emily Richard, another junior, won the 5,000 with a qualifying time of 17:49.24. Freshman Dan Sarbacker led the men's effort

with a first-place showing in the 400 meters (52.23 seconds).

This Week: 11 a.m. Saturday, April 4, at Northwest Missouri State University Invitational, Maryville, Mo.

Women's tennis wins

The women's tennis team moved three games over the .500 mark by sweeping three weekend matches in Memphis, Tenn. The Bears defeated DePauw University (5-4) and Millsaps College (7-2) Saturday, March 28, before handing host Rhodes College a 7-2 loss on Sunday.

Current Record: 7-4

This Week: 9 a.m. Saturday, April 4, vs. Wheaton College (at Principia College), Elsah, Ill.; 10 a.m. Sunday, April 5, vs. Nebraska Wesleyan University, Tao Tennis Center.



Social work students converge in a stairwell window seat in the new Goldfarb Hall. Comfortable gathering places and abundant sunlight are only two of the many improvements the building offers the George Warren Brown School of Social Work.

Social work school revels in new building — from page 1

international students than any other school of social work.”

Construction of Goldfarb Hall began in September 1996, and all but a few projects were completed by last month's scheduled completion date. A formal dedication ceremony is planned for May 1.

Situated along Forsyth Boulevard on the south side of Brown Hall, the new building is named in honor of Alvin Goldfarb, B.S.B.A. '37, the retired president of a St. Louis-based women's apparel retailer who provided initial funding toward the building's construction. Goldfarb Hall has been constructed to interconnect seamlessly with Brown Hall, which opened its doors in 1937 as the first building in the nation constructed specifically for a school of social work. The school is in the process of raising additional funds to maintain and improve both buildings well into the next century.

Constructed in the University's trademark collegiate gothic style, Goldfarb has a lower level and three upper stories that together add nearly 30,000 square feet of assignable space to the school. The building includes 26 faculty offices, 19 administrative offices, five classrooms, four seminar rooms, three practice labs and permanent space for the school's three education and research centers.

Five rooms have been set aside for computer and information technology functions. To support research, there are three work rooms, three offices and a multi-project meeting room for doctoral students. Other amenities include a vending and kitchen area, staff lounge, student commons and a soon-to-be-landscaped enclosed courtyard made possible by a gift from Lucy and Stanley Lopata.

Kitchen facilities in the new building already have been put to good use by social work students, some of whom recently used the space to sell bagels as part of a fundraiser to feed the hungry.

The new building has been long awaited. For much of the last decade, the school has struggled to ease space shortages in Brown Hall by making use of temporary office space scattered across campus, including makeshift quarters in Prince Hall, West Campus and the Hampton Avenue administration building. Getting all the school's research centers, doctoral students and faculty back

under one roof has the school buzzing with enthusiasm.

For Wendy Auslander, Ph.D., an associate professor of social work now working on a project co-sponsored by the school's Center for Mental Health Services Research and the Center for Social Development, the new building means increased convenience and synergy for research. Once housed far from each other in space at West Campus and Prince Hall, the two centers now share adjoining office areas in Goldfarb, allowing for much greater interaction among students and faculty working on the joint project.

Windows and the prospect of fresh air and sunlight are among the biggest pluses of the new building for Arlene Stiffman, Ph.D., professor of social work and chair of the building committee.

“Most of us have windowed offices now, and it's so much more pleasant,” said Stiffman, who recently moved to Goldfarb from a windowless room in the heart of West Campus. “For years, I've had my stuff split between two offices, and for the last six months, many of my things have been packed away out of reach. It's great to have everything together again in one office.”

Stiffman added that the scheduling of meetings and seminars has become much easier thanks to the wealth of various-sized rooms now available in Goldfarb. “One of the big issues at West Campus was that there were only a few large conference rooms in the building and these had to be reserved well in advance,” she said. “Now there's plenty of very nice space to use for impromptu meetings and discussions.”

Among the big winners in the move to Goldfarb are the school's doctoral students, many of whom were based at locations off the Hilltop Campus for the last few years.

“When I was working off campus, I found myself missing out on many of the lectures and presentations that took place in social work and elsewhere on the Hilltop,” said Eric Hadley-Ives, a fourth-year doctoral student whose research compares social welfare policies in the United States and China. “Having a chance to attend these events is one of the big reasons for being on a top-ranked campus.”

Like other doctoral students, Hadley-Ives will now have office

space in Goldfarb, making it much easier, he said, to meet with master's students taking his course on social, political and economic development issues.

“Before, the only way for me to have office hours was to reserve an empty classroom and hang out there waiting for students who might need to talk to me about the course,” Hadley-Ives said.

School administrators began giving serious consideration to a new building in 1992, when Khinduka formed an in-house committee to study the school's long-term facilities requirements as part of the University's Project 21 initiative. Under Stiffman's leadership, the building committee polled faculty, students and staff and developed a comprehensive outline of both existing space problems and projected needs.

The building was designed by Kallman, McKinnell & Wood Architects Inc., the same Boston-based firm that developed plans for Simon Hall, which houses the John M. Olin School of Business, and for McDonnell Hall, home of the departments of Biology and Earth and Planetary Sciences, both in Arts and Sciences. The new building was designed so that roof spires, parapets and other architectural details replicate those of Brown Hall.

“Our intent has always been to have the new building look as though it were constructed at the same time as Brown Hall,” said Frank Freeman, project manager in the University's architectural design office. — *Gerry Everding*

Goldfarb's high technology supports teaching, research

A highlight of the George Warren Brown School of Social Work's new Alvin Goldfarb Hall is state-of-the-art wiring for high-tech computer and technology applications. The building is equipped throughout with the latest communications technology, including sophisticated voice and data lines, coaxial video cabling and fiber optics.

“The school has set the building up in such a way that they should be able to do practically anything that is now possible with the communications technology available today and for some time into the foreseeable future,” said Frank Freeman, project manager in the University's architectural design office.

Among technologies envisioned in the not-so-distant future, for instance, is the use of virtual reality software to help social work students “experience” the difficulties a person in a wheelchair might face in trying to negotiate steps or open heavy doors.

High-tech wiring will allow the school to connect classrooms with seminar and conference space, offering the potential to broadcast a lecture in the school's auditorium to every part of the new building and to tie various rooms to common connections to the Internet or to a satellite downlink. One classroom is being set aside for the installation of equipment that will allow the school to pursue international and long-distance learning programs using multimedia Internet links and video conferencing.

Every office in the new building has at least one data port. Every seminar, conference and classroom has at least two data ports, and some rooms have as many as 30. Each port includes data, voice, video and fiber optics connections.

Clayton W. Hicks, technology coordinator for the social work school, provides this checklist of

technologies that will be available when Goldfarb is dedicated next month:

- The third floor seminar room will be a full presentation room allowing a presenter to control lighting, sound and data projectors, to display video and computer screens (with full network and Internet connections) and to use a document camera and a digital writing tablet.

- The computer instruction room provides 24 flat-screen computers that will allow the instructor to control each student's computer from the instructor's station, display either the instructor's or any student's computer display through data projectors mounted on the ceiling or shut down computers to focus attention on the instructor.

- Centralized video operations allow one secure room to hold all video equipment with the ability to route out to all the classrooms where instructors can run VCRs and Laserdiscs with hand-held remote controls.

- Wireless networking is available in all classrooms and common areas, allowing students to walk into class with their laptops and, by means of a special network card, connect to e-mail, Internet and file servers without hooking up any wires. They also will be able to sit outside in the courtyard between the two buildings and access the same service.

- A digital editing room provides a facility for creating in-house instructional tapes. Technology has made the difference in ease of use for those lacking advanced technical skills and in relatively low cost compared to traditional equipment.

- Three observation rooms hold two permanently installed remote-controlled cameras, allowing students and teachers in adjacent rooms to view therapy sessions, child behavior and other interactions.

— *Gerry Everding*

Tackling transportation — from page 1

expanded part of the Brookings Hall parking lot, adding 94 spaces. The parking permit program was revised to increase by more than 100 the number of green permits while cutting their annual cost from \$175 to \$90.

An addition to the South 40 parking structure has provided 100 more spaces, and the University's Board of Trustees has approved enlarging the Millbrook parking structure to include an additional 245 spaces.

The Clayton Board of Aldermen has approved a plan to convert 69 metered spaces along Forsyth Boulevard to University parking as well. And ridership has exceeded expectations since the University's

shuttle system initiated 15-minute service to the Skinker-DeBaliviere neighborhood, where many graduate and professional students live.

To help further plans, a traffic and parking consultant will assess the situation, and an advisory committee comprising faculty, staff and students will evaluate proposals, Hoffner said.

At the May 18 Staff Day celebration, there will be a transportation awareness tent to provide information on ways to reduce the number of vehicles coming to campus.

Employee input is welcome. “If someone has a good idea,” Siedband said, “I'd love to hear it.” Suggestions may be e-mailed to parking@wustl.edu.

— *Martha Everett*

Campus Watch

The following incidents were reported to University Police from March 23–29. 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 Web site at <http://rescomp.wustl.edu/~wupd>.

March 23

9:05 p.m. — A student reported the theft of a stereo and several CDs, valued at \$767, from a locked art studio in Bixby Hall.

March 24

12:05 p.m. — A contractor reported the theft of a marble buffer, valued at \$2,920, from the third floor of Goldfarb Hall.

7:25 p.m. — A student reported inadvertently spraying windshield washing fluid on pedestrians. When the student then parked in front of Liggett Residence hall, a black car occupied by two persons pulled up, and the car's driver flashed a knife at the student, then drove south on Shepley Drive to Wydown Avenue. An investigation is continuing.

March 27

4:15 p.m. — A student reported receiving harassing e-mail messages from an acquaintance in New York. An investigation is continuing.

University Police also responded to five additional reports of theft, two reports of vandalism, one report of fire and one additional report of harassing e-mail.

For The Record

For The Record contains news about a wide variety of faculty, staff and student scholarly and professional activities.

Of note

Jeffrey I. Gordon, M.D., Alumni Professor and head of the Department of Molecular Biology and Pharmacology and professor of medicine, has received a three-year \$970,888 grant from the Department of Health and Human Services for a project titled "Regulation of Gene Expression in the Small Intestine." ...

Eduardo A. Groisman, Ph.D., associate professor of molecular microbiology, has received a five-year \$955,829 grant from the National Institute of Allergy and

Infectious Diseases for a project titled "Molecular and Structural Bases of Polymyxin Resistance." He also was given a \$233,000 award from the NATO Collaborative Research Grants Programme for a project titled "Modulation of Salmonella Peptidoglycon Structure by Host and Environmental Factors."

Speaking of

John Drobak, J.D., professor of law, spoke on "Cognition, Institutional Economics and Technological Innovation" and participated in a roundtable discussion at the National Science Foundation Design and Manufacturing Grantees Conference held in Seattle.

On assignment

Jerome R. Cox Jr., Sc.D., the Harold B. and Adelaide G. Welge Professor of Computer Science, is an initial member of the University Corporation for Advanced Internet Development's (UCAID) Application Strategy Council. Cox will help advise UCAID on the conceptualization, functionality, technical design and development priorities of advanced network applications. ...

Leah A. Merrifield, associate program director of the full-time master of business administration degree program in the John M.

Olin School of Business, was recently elected to the board of directors of MBA Student Services Professionals, a professional association affiliated with the Graduate Management Admission Council. Her duties include co-chairing the programming and conference committee. ...

Carter Revard, Ph.D., professor emeritus of English in Arts and Sciences, has been granted a six-week residency from late last month through the end of April to write poetry at The MacDowell Colony in Peterborough, N.H. During his residency, he also will be completing work on a book of

poems and memoir-essays titled "Winning the Dust Bowl," which has been accepted for publication by the University of Oklahoma Press in 1999. In addition, Revard's book of essays titled "Family Matters, Tribal Affairs" was published last month by the University of Arizona Press.

To press

Stuart A. Banner, J.D., associate professor of law, has had a book titled "Anglo-American Securities Regulation, 1690-1870" accepted for publication by Cambridge University Press.

Obituaries

Norris K. Smith, professor emeritus of art history and archaeology

Norris K. Smith, Ph.D., professor emeritus of art history and archaeology, died March 24, 1998, in Fayetteville, N.C. He was 80.

Smith served in the Department of Art History and Archeology in Arts and Sciences for more than 25 years, from 1956 to 1982. In 1976, he was named acting chair of the department and, in 1977, became chair, a position he held until his retirement in 1982. He was named professor emeritus in 1983.

"Norris Smith taught at Washington University for over 25 years, and I think that, during that time, the majority of undergraduates who attended the University took at least one course with him," said Mark S. Weil, Ph.D., chair of art history and archaeology. "His reputation as a great and inspired teacher remains in the St. Louis community to this day. When you speak with alumni who attended during his years here, they associate the Department of Art History and Archeology with Norris Smith."

A distinguished art historian, Norris was the author of a number of articles as well as four books: "Frank Lloyd Wright: A Study in Architectural Content" (1966), "Medieval Art: An Introduction to the Art and Architecture of Europe, A.D. 300 - A.D. 1300"

(1967), "On Art & Architecture in the Modern World" (1971) and "Here I Stand: Perspective From Another Point of View" (1994).

A native of Little Rock, Ark., Smith earned undergraduate and graduate degrees from Columbia University, where he was a student of the great 20th-century art historian Meyer Schapiro. Smith taught at Columbia and at Hunter College in New York before coming to Washington University.

Smith's wife, Mary, died in 1995. He is survived by a daughter, Ellen Smith of Fayetteville; four sons, David Smith of Lexington, Mass., Stephen Watson Smith of Colombia, Md., the Rev. Jonathan Smith of Waskom, Texas, and the Rev. Peter Norris Smith of Goose Creek, S.C.; and seven grandchildren.

A funeral service was held March 27 at the Highland Presbyterian Church in Fayetteville. Burial was March 28 at the Roselawn Memorial Park in Little Rock.



Norris K. Smith

Orland Johnson, professor emeritus of musicology, choral director

Orland Johnson, Ph.D., professor emeritus of musicology and former director of choral organizations, died of lung cancer March 22, 1998, at Barnes-Jewish Hospital. He was 73.

Johnson taught in the Department of Music in Arts and Sciences for 28 years, from 1961 until his retirement in 1989. As



Orland Johnson

director of choral organizations, he prepared and conducted dozens of choral works with the Madrigal Singers, the University Choir and the

Civic Chorus. He was named professor emeritus in 1989. "Under Orland Johnson's direction, the University choirs achieved musical heights that included performances with the Saint Louis Symphony Orchestra at New York's Carnegie Hall," said Sue Taylor, lecturer in music.

"He was much beloved by his students, both those in musicology and those who sang under his direction."

A native of Dallas, Johnson earned a bachelor of music degree from North Texas State College in 1947 and earned a master of music degree in 1953 from the same institution. In 1965, he received a doctorate in musicology from the University of Texas at Austin, where he taught before coming to Washington University.

Johnson is survived by his wife of 35 years, Suzanne Johnson; two daughters, Leota Dunn of Dallas and Christina Johnson of San Diego; three sons, Byron Johnson of McKinney, Texas, Richard Johnson of Chicago and Adam Johnson of St. Louis; and six grandchildren.

A memorial service will be held at 1 p.m. April 26 at Florissant Valley Christian Church, 1325 N. Highway 67. Memorial contributions may be made to the American Cancer Society, 4207 Lindell Blvd., St. Louis, MO, 63108.

Law students place high in competitions

Third-year law student Stephen Palley and second-year student Rebecca Hirselj recently won second place at the National Trial Competition sponsored by the American College of Trial Lawyers and the Texas Young Lawyers Association.

Palley, Hirselj and third-year student Kim Hobley previously won the Midwest Regional Law School Trial Competition. The team is coached by a pair of law school alumni, St. Louis Circuit Judge David C. Mason, the 1983 National Trial Team champion, and assistant coach Mark Rudder, a former National Trial Team regional winner and a St. Louis attorney.

Some 120 law schools in 12 regions hold regional competitions, with the top two teams in each region qualifying for the national competition in San Antonio, Texas. More than 1,000 law students compete in what is considered the most competitive and prestigious of the law school advocacy competitions, Mason

said. This was the law school's 17th appearance at the nationals. The school was national champion in 1983 and 1986 and has advanced into the top eight or final four teams eight times, including this year's second-place finish.

Law School Dean Dorsey D. Ellis Jr., J.D., said: "The trial team's success is due to the willingness of alumni and other prominent local attorneys to teach in our lawyering skills program. The law school's world-class faculty and outstanding student body create the learning environment necessary for students to develop high standards of excellence in academic competitions, as well as in their classroom studies. The success of the trial team exemplifies the quality of all the academic work at the law school."

In recognition of his accomplishments as a student advocate, the Lawyers Association of St. Louis will present Palley with the Milton Napier Award on Tuesday, April 7.

"The competitions have been

my most rewarding experience in law school," Palley said. "I feel prepared to give my future clients effective representation in the courtroom."

Law school students also have taken high honors in other recent lawyering skills competitions, including:

- Third-year law student James Mathis won High Oralist in the National Environmental Moot Court Competition at Pace University Law School. Mathis and his teammates, third-year law students Patrick Kenney and Derrick Kirby, placed third overall in the national competition.

- Five students advanced to the semifinal rounds in the Jessup International Regional Moot Court Competition in Oklahoma City and won third place for their entry in the written portion of the competition. The students are second-years Abraham Gutnicki and Robert Tomilson and third-years Patrick Holcombe, Kevin Long and James Watson.

News Analysis

News Analysis contains excerpts from the For Expert Comment service. The service, which provides timely faculty comments to media across the country, is distributed by the Office of University Communications.

Paula Jones case against Clinton on shaky ground for failure to show 'job detriment,' expert asserts

Law Professor Jane Aiken, J.D., is an expert on "sexual character evidence" and on recent rules making it harder to bring into evidence a plaintiff's sexual history but easier to include the sexual past of the defendant. She believes the Paula Jones case against President Clinton is on shaky ground. Her article on the amended evidence rules, "Sexual Character Evidence in Civil Actions: Refining the Propensity Rule," will be published next month in the Wisconsin Law Review.



Aiken believes the Paula Jones case is weak because it boils down to one alleged incident and it does not demonstrate how the alleged harassment affected Jones' employment situation. "Paula Jones has failed to show a tangible job detriment, and that pervades all of her claims," Aiken said. "She has not met the legal requirement of showing sexual harassment."

To prove sexual harassment, Jones would have to show that retaliatory action had been taken against her for her refusal to submit to the alleged request for sexual favors or that a pattern of repeated, unwanted sexual advances by the president had created a hostile work environment.

The case is likely to survive a motion for summary judgment, or dismissal, because it is so sensational but will face major hurdles at trial, Aiken said. "There have been a few other cases in which sexual harassment was alleged based on one incident, but these involved rapes and not a sexual pass," Aiken said. "If the facts are true in the Jones case, it's grievous but not enough to make a hostile environment claim under the law."

Aiken believes the case never would have

gotten this far had it involved ordinary citizens and lacked the financial backing for such an extensive investigation. "In most cases, you do not see this kind of wholesale discovery," she said.

Accusations brought by Kathleen Willey are likely to help Jones survive the motion for dismissal by suggesting facts that may indicate a pattern of conditioning job success on sexual availability. Even if there is a pattern, the real issue is not whether the alleged event occurred but whether Jones has established a sufficient connection between the act and an employment detriment, Aiken said.

"Paula Jones' efforts to find 'other women' with whom Clinton allegedly had sexual relations would only work in trial if Ms. Jones can prove she had problems personally in her job," Aiken said. "All that prior fishing means nothing unless she can say the harassment affected her employment situation."

Such evidence about "other women" also can be excluded by a judge if it is ruled irrelevant or if the judge finds it would so prejudice a jury that it would diminish the jury's ability to reach a fair verdict, Aiken said. The judge in the case already has ruled that Clinton's alleged relationship with Monica Lewinsky is tangential and will not be allowed into evidence.

In her response to the president's motion for summary judgment, Jones offered an affidavit from a sex therapist who noted that ever since the president's alleged sexual misconduct in the hotel room, Jones has experienced sexual aversion. This allegation opens the door to evidence about Jones' sexual past and present despite a new rule of evidence that would ordinarily shield her sexual history, Aiken said. The president's lawyers suggested that they might offer such evidence but decided against it after considerable public criticism of such tactics.

Opportunities & personnel news

Hilltop Campus

Information regarding these and other positions may be obtained in the Office of Human Resources, Room 130, at West Campus. Job openings may be accessed via the World Wide Web at cf6000.wustl.edu/hr/home. If you are seeking employment opportunities and are not currently a member of the Washington University staff, you may call our information hotline at 935-9836. Staff members may call 935-5906.

Business Manager/Assistant to the Dean 980231. *University College.* Requirements: bachelor's degree, master's preferred; knowledge of accounting and data management; administrative experience and supervisory ability; knowledge of University procedures. Responsibilities include directing the financial operations of University College and Summer School and office management.

Database and Systems Engineer 980232. *Earth and Planetary Sciences.* Requirements: master's in engineering, computer science or a physical science; at least three years experience with Unix and PC-based systems; proficiency in C and Fortran; familiarity with commercial database and graphics packages; proficiency with failure diagnostics, computer systems management, installation and maintenance of computer and network hardware and software; experience with digital image processing desirable.

Manager of Personal Computing Support 980234. *Business School.* Requirements: bachelor's degree in business, computer science, engineering or related field; two years experience with Windows NT, Apple Macintosh, MS DOS, Windows 95, Windows 3.1 and Novell Platform; experience with supporting a large number of application programs for general purpose computing including spreadsheets, word processors, databases, graphics, presentations and statistics; knowledge of Microsoft Backoffice, especially MS Exchange server; knowledge of computer programming and data communications; ability to learn new computing tools quickly; demonstrated customer service orientation and skills.

Administrative Accounting Assistant 980235. *Center for Technology Management.* Requirements: high school education. Responsibilities include serving as principal contact person for issues or problems arising from income distributions; invoicing of third parties for reimbursement of expenses associated with patent activities; maintaining financial records for all income and expense recovery activity; assisting with collection of overdue payments from licensees and third parties; preparing year-end report regarding departmental expense allocation activity; distributing appropriate information regarding patent and/or license expense to PIs and department administrators; establishing and maintaining files for license agreements, sales, service and material transfer agreements.

Business Development Manager 980236. *Center for Technology Management.* Requirements: bachelor's degree, higher degree in scientific discipline (biomedical, engineering or computing) and five years business experi-

ence working with product development or business unit responsibility in a high-technology company preferred; communications and negotiating skills; organizational ability; willingness to work as part of a team; working experience with licensing intellectual property (patents, copyrights, etc.) preferred.

Department Secretary 980237. *Alumni and Development Program.* Requirements: some college, associate's degree preferred; specialized secretarial and business training; minimum three years general office experience, including word processing; strong verbal and written skills; pleasant, professional manner with co-workers, volunteers and outside vendors; strong organizational skills and the ability to apply these skills toward accomplishing multiple priorities with minimum supervision; overtime availability.

Phone Operator 980238. *Undergraduate Admissions.* Requirements: high school diploma; discretion and good judgment in dealing with public; superior attendance record; ability to work well under pressure; sense of humor. Responsibilities include handling five incoming telephone lines for Undergraduate Admissions; data entry support; assisting in preparing visit confirmation letters and itineraries.

Word Processing Operator 980239. *Social Work.* Requirements: high school diploma, some college preferred; experience with PCs, Windows or Windows 95 and Microsoft Office; knowledge of grammar and spelling; ability to proofread own work; ability to work with students, faculty, administrators and staff; pleasant telephone manner. Responsibilities include providing word processing and secretarial support to faculty; answering general office line; sorting mail; directing faxes; backing up supervisor in directing work study students.

Senior Records Auditor 980240. *Office of the Registrar.* Requirements: some college, associate's degree preferred; experience with computers; proficiency in data entry; interest in working with automated systems; ability to handle multiple jobs with speed and accuracy; service orientation. Responsibilities include providing professional and courteous service to University and non-University callers.

Word Processing Operator 980241 (part time). *Social Work.* Requirements: some college preferred; experience with PCs, Windows or Windows 95 and Microsoft Office; transcription experience and above-average knowledge of grammar and spelling; ability to proofread own work; ability to work with faculty, administrators, staff and students under minimum supervision; pleasant telephone manner. Responsibilities include providing word processing and secretarial support for the school; word processing for the faculty research office; faculty correspondence; course outlines.

Research Assistant 980245. *Psychology.* Requirements: bachelor's degree preferred; psychology research experience; computer experience in graphics, word processing and spreadsheets; experience with FMRI/ERP/OR Meg data acquisition and analysis; ability to work well independently; ability to interact well with research subjects.

Coordinator for Academic Support 980246. *Office of the Registrar.* Requirements: bachelor's degree or equivalent experience in higher education preferred; proficiency in

word processing and PC or mainframe systems data entry; good written and verbal communication skills; ability to learn quickly and make adjustments to changing departmental needs; attention to detail; good service orientation; ability to function effectively in team environment.

Project Manager/Assistant Manager 980247. *Facilities Planning and Management.* Requirements: bachelor's degree in mechanical engineering; minimum 10 years engineering experience in design and construction of building systems; supervisory skills; good working knowledge of mechanical codes; ability to read and interpret plans and specifications; good working knowledge of the design and construction industry to assess quality of work being performed; ability to make judgments on acceptability, proper means and methods of design and construction of building systems; computer experience in word processing and spreadsheets preferred; good communication skills; ability to organize time and priorities; self-motivated, responsible and mature.

Coordinator Women's Programs and Community Service 980248. *Office of Student Activities.* Requirements: master's degree in higher education and student affairs, social work or related field; three years related work experience advising and working with college students; knowledge of issues of sexual harassment and sexual assault; knowledge and practical experience with women's leadership development; knowledge of student development theory and concepts; excellent communication, interpersonal and advising skills; ability to relate effectively with students; energy; initiative; creativity; organizational skills; tolerance for ambiguity; ability to work as a member of a team.

Focus Specialist 980250. *Student Financial Services.* Requirements: bachelor's degree; planning and organizational skills; ability to make timely and sound decisions; well developed service orientation; ability to use team-building skills to accomplish tasks; strong initiative; effective communication skills; ability to present ideas in clear and concise manner and listen actively; excellent written communication skills; ability to tailor writing styles according to varying forms of communication; analytical skills; talent for creative thinking; ability to work under pressure; adaptability; flexibility; resourcefulness; tenacity; resilience; high degree of professionalism; appreciation for University and department vision; ability to create and nurture relationships.

Service Center Team Leader 98251. *Student Financial Services.* Requirements: associate's degree; ability to make timely and sound decisions; strong initiative; ability to present ideas in a clear and concise manner and to listen effectively; excellent written communication skills; ability to tailor writing styles according to varying forms of communication; analytical skills; creative thinking; ability to work under pressure; adaptability; flexibility; resourcefulness; tenacity; resilience; high degree of professionalism; appreciation for University and department vision; ability to create and nurture relationships; ability to lead team members in service environment and in challenging processes.

Licensing Case Coordinator 980252. *Center for Technology Management.* Requirements: bachelor's degree, master's preferred; excel-

lent computer skills (PC Windows platform); communications skills; organizational ability; willingness to work as part of a team; attention to detail.

Academic Secretary 980255. *Political Science.* Requirements: some college, degree preferred; ability to organize, set priorities and follow up on details; ability to work on several projects simultaneously; excellent interpersonal and computer skills; knowledge of University procedures preferred.

Medical Campus

The following is a partial list of positions available at the School of Medicine. Employees interested should contact the medical school's Department of Human Resources at 362-7196 to request applications. External candidates may call 362-7195 for information regarding applicant procedures or may submit resumes to the Office of Human Resources, 4480 Clayton Ave., Campus Box 8002, St. Louis, MO 63110. Job openings also may be accessed via the World Wide Web at <http://medicine.wustl.edu/wumshr>.

Systems Manager 980854. *Medical Library.* Requirements: bachelor's degree in computer science or four years related experience in systems administration; two years experience maintaining multiple notes servers in a production NT or Unix environment; experience in Notes/Domino 4.5, SMTP MTA and TCP/IP preferred. Responsibilities include Lotus Notes administration and serving as backup to NT Systems Manager.

Statistical Data Analyst 980893. Requirements: bachelor's degree in statistics, computer science or related field; one year experience; experience using SAS and other database packages to manage large databases and oversee personnel responsible for entering and cleaning data, preferably in research setting; knowledge of Microsoft Access and Excel a plus. Responsibilities include maintaining several large databases for cancer studies in fast-paced, busy PSA studies laboratory.

Executive Secretary 980943. Requirements: high school diploma or equivalent with at least three years office experience; good typing and grammatical skills; professional demeanor; excellent telephone skills. Responsibilities include typing correspondence, manuscripts and course handouts; answering telephone and placing calls; scheduling meetings; handling travel arrangements.

Secretary III 981144. Requirements: high school diploma or equivalency with three or more years experience in medical office setting; ability to type and use various software processing packages to set up spreadsheet and report formats; knowledge of medical terminology; good communication and organizational skills. Responsibilities include secretarial duties such as typing, dictation, manu-

scripts, scheduling meetings and making travel arrangements.

Systems Support Technician II 981157. Requirements: associate's degree in computer science with two to four years experience; thorough understanding and knowledge of computer components and their interface requirements. Responsibilities include providing full range of desktop support services to end users; installing and maintaining computer software, printers and peripherals; troubleshooting, diagnosing and resolving problems; instructing end users on use of equipment; maintaining inventory records of equipment and computer hardware.

Medical Secretary 981158. Requirements: high school equivalency with some business work experience; typing skills (60-70 wpm) with high degree of accuracy; confidentiality; effective communication and organization skills; working knowledge of medical terminology; knowledge of general office machines; high level of professionalism and superior work ethic. Responsibilities include working closely with another full-time secretary; assisting in the coordination of secretarial duties; typing correspondence, reports, manuscripts and patient information forms; dictation and transcription; arranging travel; receiving and routing phone calls; completing insurance and disability forms; scheduling physician and patient appointments; maintaining physician calendar; setting up and maintaining patient charts and records.

Technician 981175. Requirements: bachelor's degree in chemistry or biology or three years experience in a biology research lab or related field; experience in molecular biology and/or immunohistochemistry preferred; ability to work from written protocols and follow instructions; manual dexterity; ability to work with other laboratory staff, unit staff and principal investigators. Responsibilities include conducting experiments using fluorescence microscopy to examine cells and tissues; performing minor surgery on small rodents; preparing solutions; placing orders for supplies; maintaining complete and organized records and reports. Flexible hours possible; 40 hours per week preferred but fewer could be negotiated.

Technologist 981181. Requirements: bachelor's degree in biology or chemistry preferred, other majors considered; two years experience in lab or equivalent class work; familiarity with molecular biology techniques and quantitative experimentation and analysis; ability to work independently; ability to apply scientific knowledge to variety of continuously evolving problems; familiarity with lab equipment. Responsibilities include planning and performing biochemical experiments and interpreting results; generating and expressing DNA sequences for receptors; generating mRNA sequences and expressing them in xenopus oocytes; using other techniques to reach experimental goals; transecting mammalian cell lines or xenopus oocytes.

New strategies to prevent bone loss — from page 1

an enzyme produced by osteoclasts that helps degrade bone.

"Whatever mechanism is involved, the discovery gives us a whole new number of strategies to pursue," Osdoby said. "Processes that regulate bone loss and osteoclast function are complex and include hormones such as estrogen and local factors such as nitric oxide." He said a better understanding of the antigen and the regulation of NO in osteoclasts might help in developing new ways to prevent bone loss.

The discovery also may have applications for inflammatory conditions such as periodontal disease and the bone-loss problems associated with orthopaedic implants by developing strategies to prevent the loosening of artificial bone implants such as hip replacements.

Nitric oxide is a known scavenger of superoxide, so the investigators are certain it makes a major contribution in halting destruction of the bone matrix. Osdoby's group has published other studies indicating that if osteoclasts release too much calcium from bone, the nitric oxide system is activated to turn off the cell. More studies are under way to understand these processes.

Osoby, whose work is supported by grants from the National Institutes of Health, published his results in the January 1998 issue of the Journal of Bone and Mineral Research.

The latest publication is part of an array of osteoclast studies Osdoby and his colleagues, including Teresa Sunyer, Ph.D., research assistant in biology in Arts and Sciences, have conducted over the past four years.

Large, multinucleated and recruited from blood cells, osteoclasts thrive in the bone environment. They work in an odd tandem with bone-forming cells called osteoblasts in the bone remodeling process. This is much like the erosion/deposition process of a river bank where material is removed and then deposited once again. The osteoblasts give; the osteoclasts take.

Osteoclasts, like NO, are dual-natured. While they quite literally eat holes in bones, in their absence, bone marrow cavities and nerve canals don't form, leading to a condition called osteopetrosis. People with this malady often have a compromised immune system and/or neurological problems.

"The osteoclasts and osteoblasts have to work together to

remodel bone," Osdoby said. "Bone is turning over all the time, and if you don't have that situation, you can have old bone matrix, where the matrix becomes brittle and susceptible to fracture."

But if the osteoclasts get the upper hand, the skeleton loses too much bone, leading to osteoporosis or inflammatory bone disease.

As for nitric oxide, there are actually three different enzymes that produce the molecule, all regulated in different ways.

One is called constitutive nitric oxide synthase, which makes NO to regulate blood pressure and vascular processes and has recently been found to play a role in male erection. Another is neuronal NO synthase, primarily associated with nerve tissues. A third form is inducible NO synthase, the kind involved in bone loss and associated with the activity of defense mechanism cells.

"Nitric oxide, as a free radical, tends to destroy proteins and DNA and RNA, but it also acts as a signal molecule," Osdoby said. "We hope the information we're gathering will help in developing new strategies to buffer the overly ambitious osteoclasts associated with a variety of musculoskeletal disorders." — Tony Fitzpatrick

'Hoop' it up with the champs!

A campuswide celebration of the women's basketball team's recent national championship victory is scheduled to tip off at 12:15 p.m. Friday, April 3, in Bowles Plaza.

Head Coach Nancy Fahey and members of the team will be presented the NCAA Division III trophy. Also scheduled to take part

in the ceremony are John Schael, director of athletics, and Justin X. Carroll, assistant vice chancellor for students and dean of students.

Included among the festivities will be cake, music and free T-shirts while supplies last.

The rain site will be The Gargoyle in Mallinckrodt Center.

'Campus Safety' is topic of two brown bag seminars

Remaining alert is a key to safety on campus, advised William F. Taylor, director of University Police. That and other safety issues will be the subject of two brown bag seminars on "Campus Safety" led by Taylor from 12:10 to 12:50 p.m. Tuesday, April 7, in Lambert Lounge, Room 303 Mallinckrodt Center, and Wednesday, April 8, in Room B of the Training and Development Center at West Campus. The seminars, which are free and open to the campus community, are sponsored by the Office of Human Resources.

The seminars will provide a general overview of campus safety and the operation of the University Police Department. Taylor will touch on violence in the workplace and discuss the types of crimes that occur on campus, how best to prevent them and what to do should a crime occur. He also

will explain how to participate in the University's Rape Aggression Defense classes and how to have a University Police officer conduct a security survey to evaluate the safety of your office. A question-and-answer period will follow Taylor's talk.

While the threat of physical danger on campus is relatively low, property is particularly vulnerable to theft from offices and workspaces, Taylor said.

"We have a very safe campus; however, we are not isolated from the communities in which we sit," Taylor said. "Anything that can happen anywhere can happen here."

His best advice: "Be vigilant. Maintain a state of awareness. And call us if you see anything suspicious."

For more information on the seminars, call 935-6126.