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Record

April 13, 2000

Volume 24 No. 27



Washington University in St. Louis



Paying tribute Julian Bond, five others receiving honorary degrees

A Nobel Prize winner in chemistry and a world-renowned sculptor are among the six people selected to receive honorary degrees during Washington University's 139th Commencement May 19. The University also will bestow academic degrees on some 2,500 students during the ceremony, which begins at 8:30 a.m. in Brookings Quadrangle.

Julian Bond, one of the nation's most respected civil rights leaders, will deliver the Commencement address and receive an honorary doctor of laws degree.

The others receiving honorary degrees are Michael M. Karl, M.D., a member of the Washington University School of Medicine faculty for more than 50 years; Yuan T. Lee, the 1986 Nobel laureate in chemistry and president of Taiwan's highest government-sponsored academic research institution; Lee M. Liberman, chairman emeritus of Laclede Gas Co. and a revered St. Louis community leader; Mary Miss, a world-renowned sculptor and installation artist; and Alvin J. Siteman, chairman and president of both Site Oil Co. of Missouri and Flash Oil Corp. and president and chief executive officer of the

Siteman Organization.

Known for raising hard questions and proposing innovative solutions, **Julian Bond** has been on the cutting edge of social change for 40 years as an activist who faced jail for his convictions, as a member of the Georgia General Assembly for more than 20 years, as a university professor and as a nationally known writer and lecturer.

Since 1998, Bond has been chairman of the board of the National Association for the Advancement of Colored People, the nation's oldest and largest civil rights organization. He also is a distinguished scholar in residence at American University, Washington, D.C., and a professor of his-tory at the University of Virginia.

Bond graduated from the George School, a Quaker school in Bucks County, Pa., in 1957 and entered Morehouse College in Atlanta that same year. He left Morehouse one semester short of graduation in 1961 to join the staff of a new protest newspaper, The Atlanta Inquirer, later becoming the paper's managing editor. He returned to Morehouse in 1971, earning a bachelor

See **Tribute**, Page 6

Construction on two parking lots east of Brookings Hall under way

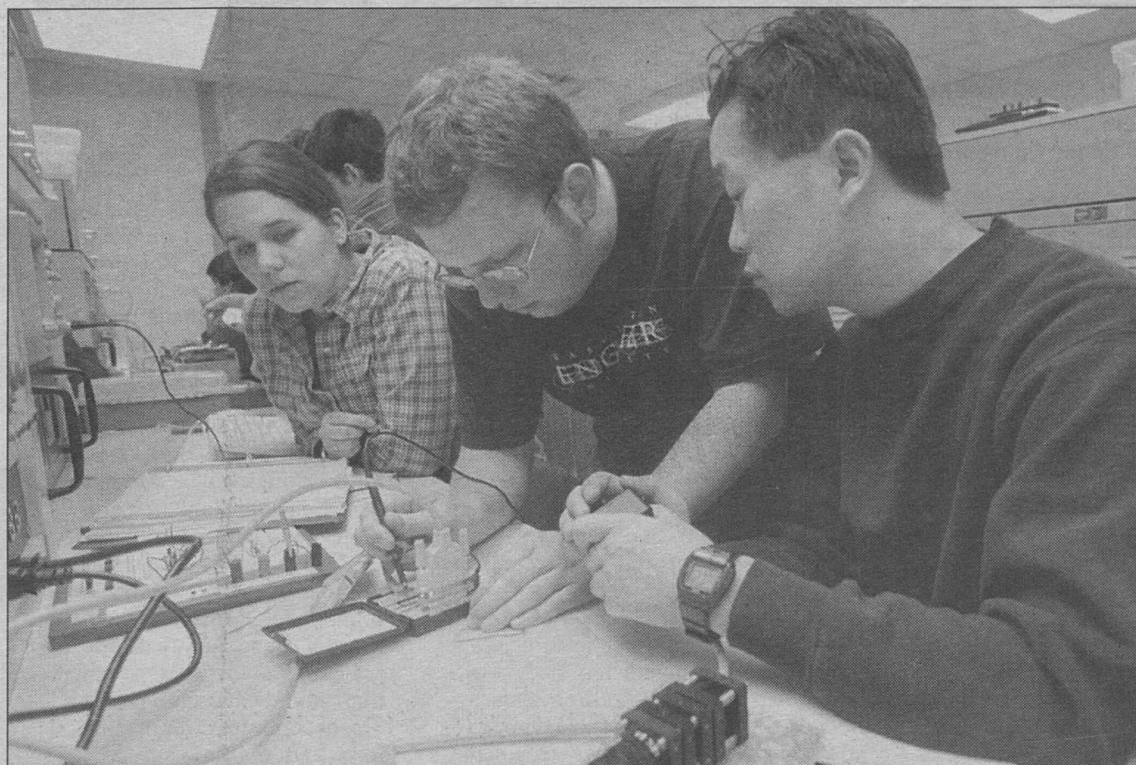
By **CHRISTINE FARMER**

Work begins this week to construct two parking lots, one to the northeast and the other to the southeast of Brookings Hall. The lots will help the University maintain its agreement with St. Louis County, which requires the Hilltop Campus to have at least 5,144 parking spaces.

A permanent parking lot will be built on the south side of campus between Chaplin and Hoyt drives, just north of Forsyth Boulevard. The lot will be accessible from Chaplin.

A larger temporary parking lot will be built on the north edge of campus bordered by Hoyt, Compton and Throop drives. It

See **Parking**, Page 6



DAVID MILLER

Jasenka Benac (left), Doug Wikle (center) and Ke Huang put their heads together over an electronics piece for a package to be included in a NASA rocket launch this June.

Students to launch project with NASA

By **TONY FITZPATRICK**

Engineering students who work hard on projects all semester often gather with fellow students at semester's end for a critique of their work, certainly by their professors and often by their peers. Electrical engineering students in EE 480, however, will have a different twist to their spring semester project: If all goes well, the fruits of their labors will be launched into space on a NASA rocket in June.

Electrical Engineering 480 is an advanced undergraduate course taught by Donald L. Snyder, Ph.D., the Samuel C. Sachs Professor of Electrical Engineering, and William H. Smith, Ph.D., professor of earth and planetary sciences in Arts & Sciences. This semester, the two professors from different schools have shared their highly acclaimed imaging expertise with the course's 13 students to help them prepare a compact package

roughly five inches in diameter and seven inches tall.

The package will be in a canister placed within a National Aeronautics and Space Administration rocket's nose cone and launched from Wallops Island on Virginia's coast. Inside will be a sophisticated hyperspectral imager along with supporting electronics and computer equipment for image and data acquisition.

The students, working in groups of two and three, have been responsible for designing, implementing and testing the sensor package and its supporting software. After the launch in June, the rocket is expected to reach an elevation of about 200 miles and land about 200 miles east of Wallops Island in the Atlantic Ocean. NASA will retrieve the package and return it to the University where the imaging data will be analyzed.

Smith invented the hyperspectral imager, called a

Digital Array Scanned Interferometer, or DASI (pronounced like "daisy"). It records digital images much like a camera, except that it can produce image data resolved into more than 100 different spectral bands. By comparison, a typical color camera and the human visual system can only resolve the visible spectrum into three broad overlapping bands — red, green and blue. Hyperspectral data, as it is known, can be used to identify and discriminate objects in a scene using highly detailed color information not discernible by the human eye.

DASI represents a rapidly emerging technology used for a broad range of remote sensing and assessment targets — agricultural crops, mineral outcroppings, ocean reefs, the Earth's atmosphere, the planets and other astronomical objects. According to Smith and Snyder, NASA has flown the DASI on various aircraft, including a solar-powered

See **DASI**, Page 7

'Small but growing' American Indian group makes its presence felt

By **DAVID MOESSNER**

A Cherokee from Oklahoma. A Shinnecock from Long Island. An Inupiaq Eskimo/Athabaskan Indian from Alaska.

One by one, a gathering of Washington University students who share American Indian heritage — a common denominator that doesn't begin to hint at the group's inner diversity — approach a large map affixed to the wall. With a long pin in hand, each of the two dozen or so in attendance steps forward and flags his or her hometown.

A half-Cherokee, half-Lakota Sioux from North Carolina. A member of the Gitksan tribe of the Tsimshian nation from the northwest coast of Canada. A half-Zuni, half-Chicana from Antlers, Okla. An Alutet from Naknek, Alaska.

Ramona Connors' job — but more so her mission — is to find a way to pinpoint more pin points. A second-year graduate student in the George Warren Brown School of Social Work, Connors' ongoing practicum has been to serve as the American Indian recruitment intern in the Office of Undergraduate Admissions.

"I think any given university wants diversity, specifically cultural diversity," said Connors, a Cornell University-educated Shinnecock who was raised in an urban Long Island setting. "Many people come from communities where they are one of many who are similar. Then you come to a university like this where you merge. Whether it's with an ethnic student, an international student, a student of same-sex orientation, there is so much diversity that you're forced to look at.

"But at Washington U. and many, many other universities, the presence of American Indians is so low that you don't have an exposure, and you're not challenging your stereotypes," she said. "So when you have an American Indian presence on campus, people are learning. They're going to programs, they're rooming together. It's an exchange. An important exchange. I think the University values that and wants that — that's why we're working so hard."

A glance at the numbers underscores the challenge. There are approximately two million American Indians in the country — less than 1 percent of the total population. With poverty as a key constraint, only about 60 percent of American Indian students graduate from high school. Approximately 20 percent go on to

college, with 5 percent graduating.

At Washington University, the numbers are indeed increasing. Connors estimates that the University's "small but growing and very active American Indian population" includes about 15 undergraduate and 20 graduate students. Reflective of Connors' intense efforts, an "extremely gratifying" total of nine undergraduates with American Indian heritage enrolled last fall. On the graduate side, more than half are linked with either the social work or law school. "That has a lot to do with their scholarships and the Buder Center," she said.

The Kathryn M. Buder Center for American Indian Studies stands as one of the nation's most respected centers for the academic advancement and study of American Indian issues related to social work. Now in its 10th year,

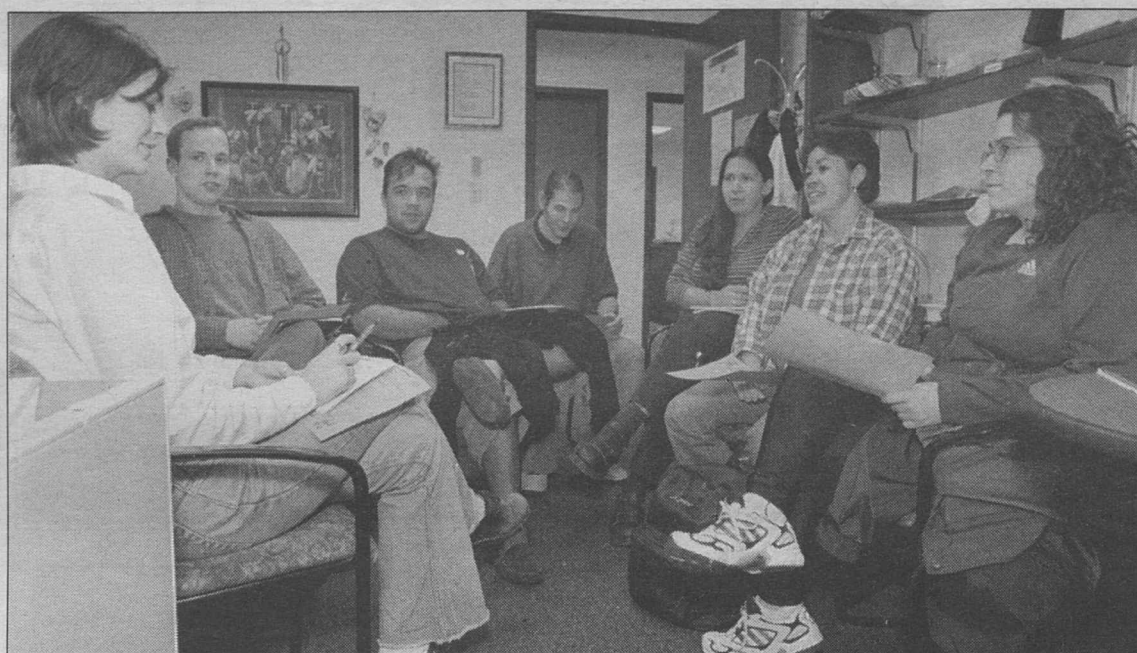
the center typically provides full scholarships to six to eight American Indians who intend to return to their native communities and practice social work.

But in addition to her recruitment efforts, Connors has turned her attention to retention issues. "When you're out recruiting," she said, "one of the first things an Indian student will ask is, 'What is the Indian community like at Wash U? Is there an organization? Are there support services?' So I'm trying to establish those."

Exhibit A is the new American Indian Student Association, which includes undergraduates and graduates from the schools of medicine, law, business and Arts & Sciences, in addition to the Buder Scholars.

"We're also trying to identify professors who are interested in

See **Heritage**, Page 2



(From the left) Chey Clifford, Jordan Lewis, Ric Munoz, Doug Keenan, Ramona Connors, Patricia Grant and Renee Cammarata assemble for a meeting of the American Indian Students Association.

Heritage

American Indian presence growing
— from page 1

working with American Indian students," Connors said. "Wayne Fields in American Culture Studies has been a big advocate. Gail Fritz from archaeology has been a strong supporter. They're interested in the academic component and have worked to bring in American Indian professors for visiting lectures."

More undergraduate scholarship support also occupies a spot atop Connors' wish list. Recently, it was announced that all incoming American Indian undergraduates would receive a Carter Revard Grant, named for the emeritus professor of English who is an Osage Indian.

A stream of candidates — each carrying at least a 3.5 grade point average — visited campus last week, including 25 ninth-, 10th- and 11th-graders from Tulsa and another 15 from Milwaukee. "Proximity to home is very important to Indian students," Connors said. "If there are ceremonies going on at home that are significant to their culture, they need to get to them just as

you or I might need to get home for Christmas."

Lisa Byers is a former and future Oklahoman. Already armed with a graduate degree from the University, she is the first American Indian enrolled in the social work doctorate program. Her emphasis is on mental health in the American Indian population. "I see this education as a tool in order to get services and resources back to Indian people," she said.

The inspiration behind Byers' perspiration is her four-year-old son, Brady, a blond-haired bundle of energy. Byers is gratified that her son already has made a strong connection with his heritage.

"Brady will struggle but in a way different than I struggled, because I didn't think I was Indian enough," she said. "And different in the way that my mother struggled as a dark woman growing up in a time when there was a lot of shame associated with it. Born in 1935, she went to school and was called 'Dirty Indian.'"

"But he will know who he is and have pride in that in the way that my mom wasn't able to communicate to me."

Every year, Byers and her husband, Wes, give Brady a special book for his birthday. This past year, Byers wrote him a book ... a book about who he is.

"Mama says that Cherokee is my eyes that are brown like the earth," she recited. "Cherokee is in the way that I always look up and see the birds and thank them for their song. And how I have respect for all things great and small."

"Mama says that Cherokee is in the way that she and I dream together at night. Mama says that for me things will be different. Because people look first and understand later, if at all."

"And when I tell people that I'm Cherokee there may be some Indian people who won't believe me. But Mama says that I must be patient ... Mama says that what's important is that I know."

For Ramona Connors, it's important that the campus community knows, as well. "We really want the whole University to recognize that we are a presence here. We're small, but we're growing."

"Any support that faculty or staff or students can offer us, we greatly appreciate," she said. "Whether it means to remember to include us in multicultural discussions. Or to include us when we're looking to hire staff or faculty. Or when we're thinking about academic courses that are being offered."

"Just to recognize that we're here, we're real. We're not just here at pow wow time."

Mellon grant funds three new dissertation seminars

Washington University has received a \$120,000 grant from The Andrew W. Mellon Foundation in support of three interdisciplinary Arts & Sciences dissertation seminars, one to be held in the summer of 2000 and two in the summer of 2001, according to Edward S. Macias, Ph.D., executive vice chancellor and dean of Arts & Sciences. This grant follows two others that funded earlier dissertation seminars.

The grants are part of a program that The Mellon Foundation has instituted at a select group of universities to address interpretive and professional issues that frequently arise at the dissertation phase in graduate education. These issues can affect the quality of dissertation research and timely progress toward degree completion. At Washington University the Mellon Dissertation Seminars have been offered under the auspices of the Graduate School of Arts & Sciences and strongly supported by Dean Robert E. Thach, Ph.D.

The theme for the 2000 Mellon seminar will be "Producing and Consuming Culture in the Early Modern World." Under the leadership of Steven N. Zwicker, Ph.D., the Stanley Elkin Professor in the Humanities and professor of English in Arts & Sciences, this seminar will explore the ways in which printed and manuscript materials, plays for the private and public theater, courtly ceremony and visual images were produced and consumed. The seminar also will examine the extent to which habits and modes of reading and seeing created the circumstances in which books and images and ideas were imagined and produced.

"We are pleased to be able again to offer to our graduate students this excellent opportunity," Macias said. "The disserta-

tion stage is one of the points at which graduate students can most benefit from participating in an interdisciplinary community, especially in the humanities and social sciences, which can greatly benefit from collaborative work. We are very pleased that the seminar will provide the opportunity for our students to work together in this important way."

The summer 2000 seminar will meet Tuesday and Thursday afternoons for six weeks, beginning May 30. Graduate students in the humanities and social sciences are invited to apply. Students attending the seminar will receive an \$1,800 stipend. To obtain an application form, contact Marie Lay in the Department of English at 935-5210. Application deadline is April 30.

Scheduled for the summer of 2001 is a seminar in "The Construction of Gender and Social Identity in European Modernism" to be directed by Gerald N. Izenberg, Ph.D., professor of history and co-director, along with Zwicker, of the program in Literature & History in Arts & Sciences. Also scheduled for summer 2001 is a seminar in "The American Landscape and American Identity," directed by Wayne Fields, Ph.D., the Lynne Cooper Harvey Professor of English and director of the American Culture Studies Program in Arts & Sciences.

In summer 1996, Zwicker directed the University's first Mellon Dissertation Seminar, "Politics and Literary Culture in the Early Modern Period." In summer 1998, he directed a second, "Material Culture and Intellectual Production in the Early Modern Period." Dissertation students in English, history, romance languages, comparative literature, philosophy and art history participated in both seminars.

Student groups organize dialogue about Palestinian-Israeli issues

"Humanizing the Conflict: Palestine and Israel" is the title of an Israeli-Palestinian dialogue designed to help dispel stereotypes about both sides in this long conflict. The event will be held at 8 p.m. Monday, April 17, in Holmes Lounge.

The Muslim Students' Association and the Israel Public Affairs Committee on campus are sponsoring the dialogue. Co-sponsors include: Students Taking on Multicultural Pursuits, the Asian Multicultural Council, the Center for the Study of Islamic Societies and Civilizations in Arts & Sciences, WUach, Saint Louis University Muslim Student Association, the Friends Service Committee and College Democrats of Greater St. Louis.

Four speakers, two representing each party to the conflict, will conduct the dialogue. They are:

- Fay Afaf Kanafani, a specialist

on Palestinian-Israeli conflict and author of "Nadia: Captive of Hope";

- Hanan Rasheed, an authority on Palestine's children and the Intifada and an activist for dialogue and peace in the Middle East;

- Rafi Danziger, director of research and information at the American Israel Public Affairs Committee (AIPAC), as well as editor of AIPAC's weekly newsletter, Near East Report; and

- Jeffrey H. Kass, president of the Zionist Organization of America (ZOA), St. Louis District. Kanafani also will sign copies of her book.

The colloquium is free and open to the public. For more information, visit the Web (<http://www.rescomp.wustl.edu/~mepeace/>) or contact the sponsors by e-mail (mepeace@rescomp.wustl.edu).

News Briefs



Campus quiz: This grandfatherly type puffs on his pipe on what Hilltop Campus building? Answer below.

Thurtene's coming!

Funnel cakes, facades and fantastic rides. Throw in a Ferris Wheel and fun and you've got the main ingredients for the uniquely Washington University recipe known as Thurtene Carnival.

This year's event, which continues the tradition of the nation's oldest and longest-running student-run carnival, will be held from 11 a.m. to 8 p.m. Saturday and Sunday, April 15 and 16, on the campus parking lot at Millbrook and Skinker boulevards. There is no admission fee, although tickets will be sold for the rides. The theme for the event is "Carnival of the Century!"

The net proceeds generated by Thurtene, the University's junior honorary, will go to benefit Our Little Haven, a residential therapeutic treatment center for babies and children.

Racing to help

The University's American Medical Association—Medical Student Section (AMA-MSS) is planning a 12-hour relay race at Bushyhead Track on the Hilltop Campus to help raise awareness and support of Missouri's Children's Health Insurance Program (MC+ for Kids), which provides health insurance for uninsured children of low-income families.

The relay begins at 6:30 a.m. Saturday, April 15; April 22 is the rain date. All are welcome to cheer on the racers and to learn more about MC+ for Kids.

Some 90,000 uninsured Missouri children are believed to be eligible for MC+ for Kids. The program provides primary, acute and preventive care; hospitalization; sports physicals; dental and vision coverage; pharmacy; physical, occupational and speech therapy; and behavioral treatment.

Dedicated dispatchers

This is National Public Safety Telecommunicators Week, and the Washington University Police are recognizing the dedicated

service of the department's four full-time dispatchers.

Bobbie Beck, Edna Canada, Richard Chiles and Linda Northington work rotating schedules, including holidays, to ensure that the University community's calls do not go unanswered. Last year, the dispatchers logged more than 40,564 reports ranging from building checks to crimes.

Calling all inventors

The National Inventors Hall of Fame is looking for students' best work, and they'll give faculty advisers \$10,000 apiece for winning entries.

The Collegiate Inventors Competition is seeking applications. Each winning student or student team receives a \$20,000 cash prize. Faculty advisers each receive a \$10,000 cash prize. The competition, open to all full-time college students and judged by distinguished scientists and inventors from across the country, awards up to six prizes each year. The deadline for applications is June 1. For more information or an application, call (330) 849-6887 or visit the Web (www.invent.org/collegiate).

Answer: The pipe-smoker adorns Francis Gymnasium, part of the Athletic Complex.

Record

Washington University community news

News & Comments

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Medical School Update

Six medical faculty receive grants totaling \$8.4 million

Numerous School of Medicine faculty recently have received grants of \$1 million or more to fund research on topics ranging from blood vessel formation to emphysema to growth disorders.

William A. Frazier III, Ph.D., professor of biochemistry and molecular biophysics and of cell biology and physiology, has received a five-year \$1.8 million grant from the National Cancer Institute for research on angiogenesis or blood vessel formation.

Frazier's group is studying the molecular switch that determines whether small vessels remain stable or become activated and sprout new vessels. Once the switch and the molecular consequences of its actions are better understood, it might be possible to take control of the switch to inhibit or promote blood vessel growth. Such manipulations might arrest the growth of tumors or resupply blood to damaged hearts.

Jane Y. Wu, M.B., Ph.D., assistant professor of pediatrics and of molecular biology and pharmacology, has received a five-year \$1.7 million grant from the National Institute on Aging. Wu is studying a cellular process called alternative splicing, which generates different forms of a protein from the same gene. Defects in alternative splicing contribute to many diseases, including several nervous system disorders.

The Wu lab will focus on a protein called tau, which stabilizes the cellular skeleton. There are at least six alternative forms of tau in the human brain. Defects in tau processing are associated with several neurodegenerative diseases, including certain types of dementia. Through molecular and biochemical studies, Wu hopes to uncover the details of tau RNA splicing.

Kerry Kornfeld, M.D., Ph.D., assistant professor of molecular biology and pharmacology, has received a five-year \$1.3 million grant from the National Cancer Institute. Kornfeld studies the molecular signals that determine the fates of developing cells.

He is investigating signaling pathways in the nematode *Caenorhabditis elegans* that also are important in humans. These pathways mediate many cell fate decisions during development, and faults in their component proteins are common causes of human tumors. One part of the research will focus on signaling proteins called MAP kinases. He also wants to determine how a MAP kinase called ERK (extracellular signal-regulated kinase) affects cell fate. A third set of experiments will focus on a protein called LIN-1, which binds to DNA and regulates the activity

of certain genes.

These studies should reveal how MAP kinases identify and interact with proteins in signaling pathways, how the composition of these pathways influences cell fate, how certain transcription factors are regulated by MAP kinase pathways, and how these transcription factors regulate cell fate.

Scott Saunders, M.D., Ph.D., assistant professor of pediatrics and of molecular biology and pharmacology, has received a five-year \$1.3 million grant from the National Institute of Diabetes and Digestive and Kidney Diseases. He studies a family of proteins called heparan sulfate proteoglycans, which regulate a number of growth factors involved in fetal development.

When the gene that produces one of these proteins is mutated, it causes a human disease called Simpson-Golabi-Behm Syndrome. Humans who have this disease overgrow before and after birth. They also have kidney, heart and skeletal defects and a high incidence of certain kinds of tumors. Saunders is using a mouse model of the disease to determine the mechanism that causes the birth defects.

Steven D. Shapiro, M.D., professor of pediatrics, of medicine and of cell biology and physiology, has received a four-year \$1.2 million grant from the National Heart, Lung, and Blood Institute. Shapiro will study lung repair in emphysema, a progressive, degenerative disease characterized by the destruction of many air-sac walls.

With this grant, Shapiro will determine whether retinoic acid, a chemical that plays important roles during development, reverses airspace enlargement in cigarette-smoking mice. He also hopes to determine whether elastic fibers perpetuate injury or initiate air-sac repair in emphysema.

Philip D. Stahl, Ph.D., has received a five-year \$1.1 million grant from the National Institute of Allergy and Infectious Diseases. Stahl, the Edward Mallinckrodt Jr. Professor and head of the Department of Cell Biology and Physiology, will study the transport of pathogens and cell debris to sites inside cells where they can be degraded.

Cells transport unwanted material that needs dismantling in structures called phagosomes. Stahl will determine whether the human pathogen *Listeria monocytogenes* avoids being degraded and killed by disrupting the function of a cellular protein called Rab5a and escaping from phagosomes early in transport. Rab5a helps regulate the transport of membrane components in cells.

Grants up to \$25,000 are available for diabetes, endocrinology research

Faculty members who conduct research in the areas of diabetes and endocrinology may apply for funding through the Diabetes Research and Training Center (DRTC) at the School of Medicine.

Researchers from the Hilltop and Medical campuses are encouraged to apply for the two-year grants, which begin Dec. 1. They will range from \$10,000 to \$25,000. Applications from basic science, epidemiological and behavioral science departments are particularly encouraged.

The DRTC pilot and feasibility program fosters projects required to develop preliminary data that could lead to independent research supported by the National Institutes of Health, which awards three to four such grants at the medical school annually.

Those interested must submit letters of intent to the DRTC by June 16; proposals must be submitted by Aug. 11. Both should be sent to Vicky Nordike at Campus Box 8127. For more information, call 747-3979.



Fielding questions on Capitol Hill Robert H. Waterston, M.D., Ph.D. (center), the James S. McDonnell Professor and head of genetics, testified Thursday before the U.S. House Subcommittee on Energy and Environment of the Committee on Science. After reporting on the progress of the publicly funded Human Genome Project, Waterston answered questions from reporters. The medical school's Genome Sequencing Center, which Waterston directs, is playing a major role in the Human Genome Project, which is deciphering the genetic instructions that make us human.

Gender might play role in drug addiction risk

BY JIM DRYDEN

Men and women are different. And in recent years, medical researchers have made an effort to take those differences into account. They have found the risk for heart disease, osteoporosis and clinical depression is different in women and men. There also might be differences in the risk for addiction.

There has been little research on the way men and women react to drugs, but recent studies suggest that nicotine, alcohol and illicit drugs present different risks to the sexes. And new work from addiction researchers at the School of Medicine indicates that opiate drugs such as heroin and morphine have different effects in males and females.

Because human gender studies have to take cultural and social factors into account, the opiate study involved rodents. Gender expectations presumably have less impact in animals.

"Any study in humans is somewhat contaminated by gender expectations and role-playing," said principal investigator Theodore J. Cicero, Ph.D., vice chancellor for research and professor of neurobiology in psychiatry. "An animal model allows us to tease some of these factors apart and look strictly at biological differences."

Past research has shown that female rats require higher doses of opiates to relieve pain. In a study reported in a recent issue of *Pharmacology Biochemistry and Behavior*, Cicero found that female rats also seem to enjoy morphine more than males. This research was supported by grants from the National Institute on Drug Abuse.

"It's hard to measure pleasure in a rat," Cicero said. "But clearly, morphine provides a positive experience. And it continues to be positive for females long after males have started avoiding the drug."

Cicero reached those conclusions by determining where rats preferred to be. The animals were placed in a gray Plexiglas chamber. Computerized doors on either side of the gray chamber

opened into two chambers, one with black Plexiglas walls and the other with white. To determine preference, Cicero observed where the rats spent the most time. At the beginning of the experiment, they liked the black chamber best.

The researchers then gave the rats morphine and placed them in the white chamber. At other times, they gave the rats an inactive substance and put them in the black chamber. "Rats are very smart, and they quickly learned to associate the white chamber with the drug," Cicero said.

After the rats made that connection and were allowed to roam freely into either chamber, most of them went to the white chamber, where there now was a supply of morphine. The rats made this choice even though they initially had preferred the black chamber.

"What we found — not only with morphine but with some other opiates like heroin as well — is that rats develop a strong

negative effects such as respiratory arrest."

It's not that the females somehow didn't get as much drug as males did.

The researchers measured blood levels and brain levels of morphine and found them to be equivalent in both sexes. So Cicero believes that the brains of males and females might be organized in slightly different ways that create very different drug use and abuse patterns.

Sex hormones, such as estrogen and testosterone, affect brain organization, and that could influence how male and female brains are affected by opiates. Even though the brains are nearly identical in size and structure, Cicero thinks male and female hormones greatly



Cicero: Studied morphine addiction

influence the way their neurons communicate.

"Probably just a few thousand cells differentiate a male brain from a female brain, but those appear

"It's hard to measure pleasure in a rat. But clearly, morphine provides a positive experience. And it continues to be positive for females long after males have started avoiding the drug."

THEODORE J. CICERO

preference for the white chamber," Cicero said. "The assumption is that they associate the chamber with a positive, reinforcing experience."

Gender differences

Although both male and female rats preferred the chamber that was associated with opiates, a gender difference became apparent as the dose of morphine increased. The males quickly developed a strong preference for the white chamber, where they got the drug. But as they received higher and higher doses, they started choosing the black chamber instead. But the females continued going to the white chamber.

"There appeared to be no dose of morphine that the females didn't continue to show a preference for," he said. "The males cut off as the dose increased and eventually became a noxious stimulus, but the females never stopped, even at levels where they experienced very

to be very powerful in determining how the brain actually functions," he said.

If these gender differences prove to be valid in humans, Cicero believes the findings could have enormous significance in the risks posed by drugs. If females take larger doses of a drug, they also might develop a greater physical dependence, and the entire approach to treatment and drug withdrawal might need to be modified in women.

"In the past, the fundamental assumption has been that abuse is abuse, and male and female abusers have been treated in a uniform way," he said. "Our results suggest that might not be true. The abuse patterns may be different in males than in females, and the quantity of drugs used by the sexes may be different. If that's the case in humans, it would be extremely important to addiction science."

University Events

'Eating One's Words' • Retinitis • Career Planning • Medieval Heresy • Successful Aging

Hotchner winner 'gitanjali' probes complex relationships

By LIAM OTTEN

Mother and daughter, girlfriend and boyfriend — personal identity is often defined by our relationships with other people. Yet what happens when those roles are stretched by time, distance or cultural heritage?

How then do we come to know who we are and what is important to us?

Such are the questions raised in Sakena Abedin's new drama "gitanjali," which will debut April 26-30 in the A.E. Hotchner Studio Theatre. Performances begin at 8 p.m. April 26, 27 and 29 and at 3 p.m. April 29 and 30.

With "gitanjali" Abedin, now in her second year at the School of Medicine, won the 1999 A.E. Hotchner Playwriting Competition, sponsored by the Perform-

ing Arts Department (PAD) in Arts & Sciences. The annual competition sponsors a full theatrical production of one work each year.

Set in New York, "gitanjali" explores the various tensions between the American-born title character and her Indian-born mother, Meera. Gita, as she's known, has been estranged from her mother since her father's death seven years ago and Meera's subsequent return to India. Now in her early 20s, Gita is surprised when Meera turns up at her apartment for an unexpected visit.

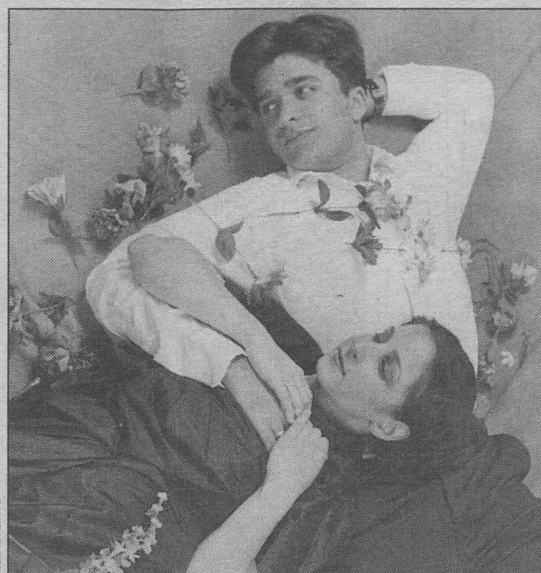
"It's a strained relationship — even growing up, Gita was closer to her father," Abedin noted. "When he died, her mother returned to India, and Gita was left to reinvent herself. In many ways she's still dealing with those losses. She's still trying to figure out who she is and what she's

"gitanjali"

Where A.E. Hotchner Studio Theatre

When 8 p.m. April 26, 27 and 29 and 3 p.m. April 29 and 30

Admission \$10; \$8 for senior citizens and Washington University faculty, staff and students



DAVID KILPER

Nastaran Ahmadi stars as Gita and Nick Choksi as Ravi in Sakena Abedin's family drama "gitanjali." The production, winner of the 1999 A.E. Hotchner Playwriting Competition, debuts April 26-30.

going to be."

Ironically, it's Gita's boyfriend, Ravi, who hits it off with Meera. "She and Ravi don't have the same sort of history between them, which makes it easier for them to relate simply as people," Abedin explained.

Though "gitanjali" is Abedin's first full-length drama, the 25-year-old author is already accomplished in the short fiction

genre. Her story "Parvati" recently was published in The New Physician, while another story, "Mrs. Prem," will be published in the upcoming anthology "Sanskar," a collection of writing by South Asian-Americans.

The production is directed by Dana Friedman, a senior in the PAD. Senior Nastaran Ahmadi and junior Catherine Brewer play Gita and Meera, respectively. Ravi is played by freshman Nick

Choksi, and junior Nicholas Montemayor plays Mohan, a merchant whose shop provides one of the play's three settings.

Tickets are \$10 for the general public and \$8 for senior citizens and Washington University faculty, staff and students, and are available at the Edison Theatre Box Office, 935-6543, and all MetroTix outlets, 534-1111. For more information, call 935-6543.

Nazarov, prof. of mathematics, Mich. State U. Room 199 Cupples I Hall (tea 4 p.m., Room 200). 935-6726.

5 p.m. Stanley Spector Memorial Lecture on East Asian History and Civilization. "The Problem of 'Women' in 20th-century Chinese Thought." Tani Barlow, assoc. prof. of history, Jackson School of International Studies, U. of Wash. Room 162 McDonnell Hall (reception following). 935-4448.

Saturday, April 15

11 a.m. Mathematics Show Me Seminar. "Instabilities in Fluid Motion." Susan Friedlander, prof. of mathematics, U. of Ill., Chicago. "Geometric Theory of Matrix Muckenhoupt Weights." Fedya Nazarov, prof. of mathematics, Mich. State U. Michael Dorff, prof. of mathematics, U. of Mo., Rolla. Co-sponsored by U. of Mo., St. Louis (coffee 10:30 a.m.). 935-6726.

Monday, April 17

10 a.m. Center for Mental Health Services Research Seminar Series. "Power Computations for Advanced Statistics." Edward L. Spitznagel Jr., prof. of mathematics, of biostatistics and of psychiatric epidemiology. Room 39 Goldfarb Hall. 935-5687.

Noon. Lung biology conference. "The Role of Elastin Degradation in the Development and Perpetuation of COPD." Barb Crippes-Trask, post-doctoral fellow in pediatric allergy/pulmonary medicine. Room 801 Clinical Sciences Research Bldg. 362-8983.

Noon-1 p.m. Molecular biology and pharmacology seminar. "Zinc and the Ischemic Brain." Dennis Choi, the Andrew B. and Gretchen P. Jones Prof. of Neurology and dept. head. Room 3907 South Bldg. 362-2725.

Noon. Neurology and neurological surgery research seminar. "Communication Between Cultured Neurons and Computers: The Creation of a Learning, Behaving System in Vitro." Steve M. Potter, Calif. Inst. of Tech. Schwarz Aud., first floor, Maternity Bldg. 362-7379.

4 p.m. Immunology Research Seminar Series. "Ig Genes and B Cell Development." Michael C. Nussenzweig, prof. of molecular immunology, Rockefeller U. Eric P. Newman Education Center. 362-2763.

4 p.m. Mathematics analysis seminar. "Set Theory and Invariant Subspaces." Nik Weaver, asst. prof. of mathematics. Room 199 Cupples I Hall. 935-6726.

4 p.m. Physics' condensed matter/materials seminar. "The Magnetic Polaron as Revealed in Studies of Manganese Oxides." John Neumeier, prof. of physics, Fla. Atlantic U. Room 241 Compton Hall (coffee 3:45 p.m.). 935-6276.

6:15 p.m. Germanic languages and literatures lecture. "Dort Sein, WO Geschichte Stattfindet. Schriftsteller in Berlin." Brigitte Burmeister, author, Berlin. Hurst Lounge, Room 201 Duncker Hall. 935-5106.

Tuesday, April 18

Noon. Alzheimer's Disease Research Center seminar. "Healthy Brain Aging and Alzheimer's Disease in Nonagenarians and Centenarians." Eva Hurst, neurology dept. Schwarz Aud., first floor, Maternity Bldg. 286-2881.

Noon. Molecular basis of cancer seminar. "Apoptosis and Cancer." John Russell, prof. of molecular biology and pharmacology. Fifth floor, bone marrow transplant conference room, Steinberg Bldg., Barnes-Jewish Hospital North. 362-8836.

"University Events" lists a portion of the activities taking place at Washington University April 13-22. Visit the Web for expanded calendars for the School of Medicine (medschool.wustl.edu/events/) and the Hilltop Campus (www.wustl.edu/thisweek/thisweek.html).

Exhibitions

"Master of Fine Arts Thesis Exhibition." April 14 through May 3 (reception 5 to 7 p.m., April 14). Gallery of Art. 935-5490.

"Architecture's Design Awards Graduation Exhibit." April 22 through May 20. Givens Hall. 935-6200.



"Super Imposed." Works of first-year master of fine arts candidates. Through April 15. Sponsored by the art school's graduate program. Des Lee Gallery, University Lofts Bldg., 1627 Washington Ave., St. Louis. 935-6500.

Film

Thursday, April 13

7 p.m. Filmboard Free Diversity Series. "Joy Luck Club." Room 100 Brown Hall. 935-5983.

Friday, April 14

7 p.m. Filmboard Feature Series. "Joy Luck Club." (Also April 15 and 16, same time.) Cost: \$3 first visit, \$2 subsequent visits. Room 100 Brown Hall. 935-5983.

9:30 p.m. and midnight. Filmboard Feature Series. "Sixth Sense." (Also April 15, same times, and April 16, 9:30 p.m.) Cost: \$3 first visit, \$2 subsequent visits. Room 100 Brown Hall. 935-5983.

Monday, April 17

4 p.m. Russian dept. film. "The Inner Circle." Room 219 Ridgley Hall. 935-5177.

Wednesday, April 19

6 p.m. Japanese Film Series. "The Tale of Genji." (English subtitles.) Sponsored by Asian and Near Eastern languages and literatures. Room 219 Ridgley Hall. 935-5156.

Friday, April 21

7, 9:30 p.m. and midnight. Filmboard Free Feature Series. "Dogma." (Also April 22, same times, and April 23, 7 and 9:30 p.m.) Room 100 Brown Hall. 935-5983.

Lectures

Thursday, April 13

Noon. Genetics lecture. "The Behavioral Aerodynamics of Drosophila: Fruit Flies Forage by Flipping for Flight Forces." Michael Dickinson, U. of Calif., Berkeley. Room 823 McDonnell Medical Sciences Bldg. 362-7072.

4 p.m. Cardiovascular research seminar. "Matrix Metalloproteinases in Vascular Diseases: Lessons From Gene Targeting." Steven Shapiro, assoc. prof. of pediatrics, of medicine and of cell biology and physiology, dir. of pediatric allergy and pulmonary div. and of lung development program. Room 801 Clinical Sciences Research Bldg. 362-8901.

4 p.m. Chemistry seminar. "Small Molecules That Hijack Transcription Factors." John Martin Essigmann, prof. of chemistry and toxicology, MIT. Room 311 McMillen Lab (coffee 3:40 p.m.). 935-6530.

4 p.m. Earth and planetary sciences colloquium. "The Pegmatite Story." David London, prof. and interim dir. of geology and geophysics school, U. of Okla. Room 361, McDonnell Hall. 935-5610.

4 p.m. History lecture. "Men Are From the Gilded Age, Women From the Progressive Era." Elisabeth Perry, the Bannon Prof. of History, Saint Louis U. Co-sponsored by the women's studies and American culture studies programs. Hurst Lounge, Room 201 Duncker Hall. 935-5450.

4:15 p.m. Philosophy and Philosophy-Neuroscience-Psychology Colloquium Series. "Eating One's Words: The Function of Language." Fiona Cowie, Calif. Inst. of Tech. Room 216 Psychology Bldg. 935-6670.

4:30 p.m. Mathematics colloquium. "Waves on Complex Hyperbolic." Gabor Francics, prof. of mathematics, Columbia U. Room 199 Cupples I Hall (tea 4 p.m., Room 200). 935-6726.

5 p.m. Vision Science Seminar Series. "CMV Retinitis in the Age of HAART." Daniel F. Martin, assoc. prof. of ophthalmol-



ogy, Emory Eye Center, Emory U. East Pavilion Aud., Barnes-Jewish Hospital Bldg. 362-5722.

Friday, April 14

9:15 a.m. Pediatric Grand Rounds. "Surfactant Proteins: Surprises From Mice and Men." Samuel Hawgood, prof. of pediatrics in residence, vice chair of academic affairs and assoc. dir. of Cardiovascular Research Inst., U. of Calif., San Francisco. Clopton Aud., 4950 Children's Place. 454-6006.

Noon. Cell biology and physiology seminar. "Nuclear Migration and Its Implications for Brain Development and Cancer." N. Ronald Morris, Robert Wood Johnson Medical School, U. of Medicine and Dentistry of N.J. Room 426 McDonnell Medical Sciences Bldg. 362-6950.

Noon-1 p.m. Gastroenterology research conference. "Regulation of Intestinal Epithelial Cell Proliferation." Vincent Yang, assoc. prof. of medicine, Johns Hopkins U. Room 901 Clinical Sciences Research Bldg. 362-8951.

12:15 p.m. Alpha Omega Alpha Society's annual medical lecture. "Farming for Spare Body Parts (Silk Purse or Sow's Ear)." John P. Atkinson, prof. of medicine and of molecular microbiology. Moore Aud., 660 S. Euclid Ave. 362-6251.

4 p.m. Anatomy and neurobiology seminar. "Development of Two-way Circuits That Link Lower With Higher Cortical Areas." Andreas H. Burkhalter, assoc. prof. of anatomy and neurobiology, of neurology and neurological surgery and of biomedical engineering. Room 928 McDonnell Medical Sciences Bldg. 362-7043.

4:30 p.m. Mathematics colloquium. "A Remark on Turán's Lemma." Fedya

Ensemble offers French Baroque music

The Kingsbury Ensemble, a rotating group of musicians that performs on instruments appropriate to the reign of French King Louis XV, will present a concert of "Virtuosic Music of the French Baroque" at 7:30 p.m. Sunday, April 16, in Holmes Lounge.

The ensemble is directed by Maryse Carlin, instructor in harpsichord and piano in the Department of Music in Arts & Sciences. Also performing are soprano Mary Wilson, a graduate student in music who was a finalist in the 1999 Metropolitan Opera National Auditions, and violinist William Bauer.

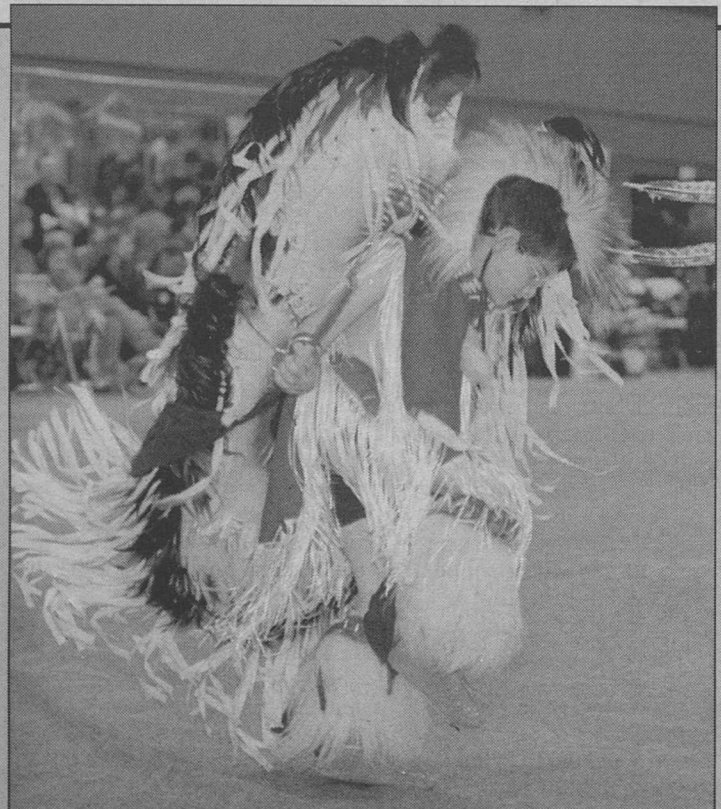
The program includes music for voice, violin and harpsichord by three Baroque composers —



Graduate student Mary Wilson performs French Baroque music with the Kingsbury Ensemble April 16.

François Couperin (1668-1773), Jean-Philippe Rameau (1711-1772), and Jean-Joseph Mondonville (1683-1764).

The concert is free and open to the public. For more information, call 935-5581.



MARY BUTRUS

Pow Wow Dillon Johnston dances in full regalia at the 10th annual Washington University Pow Wow, held Saturday, April 8, in the Field House. The pow wow, the centerpiece event of American Indian Awareness Week, included American Indian dancers, trading booths, arts, crafts, music and food.

'Betrayal of the American Male' is topic of Assembly Series talk

Pulitzer Prize-winning author Susan Faludi will give the annual Women's Society Adele Starbird and Neureuther Library Lecture,

titled "The Betrayal of the American Male," at 11 a.m. Wednesday, April 19, in Graham Chapel. The lecture, part of the Assembly Series, is free and open to the public.

Faludi is the author of "Backlash: The Undeclared War Against American Women" and "Stiffed: The Betrayal of the American Male." In "Backlash," which won the National Book Critics Circle Award in 1991, she challenged the notion that women feel miserable and conflicted because they now have too much equality with men, can't take the pace and are desperately seeking a return to the



Assembly Series

Who Susan Faludi

Where Graham Chapel

When 11 a.m. April 19

Admission Free and open to the public

familial nest.

Faludi has written for The New York Times, the Miami Herald, the Atlanta Journal-Constitution and the Wall Street Journal. She won a Pulitzer Prize in 1991 while writing for the Wall Street Journal for "The Reckoning," an article on the human impact of the leveraged buyout of the Safeway supermarket chain. Faludi received a bachelor's degree in history and literature from Harvard in 1981.

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

Noon. Molecular Microbiology and Microbial Pathogenesis Seminar Series. "The Trypanosome's Myristate Dilemma." Paul Englund, prof. of biological chemistry, Johns Hopkins Medical School. Cori Aud., 4565 McKinley Ave. 747-5597.

12:10-12:55 p.m. Physical therapy research seminar. "Lipid Metabolism During Exercise." Samuel Klein, prof. of medicine, gastroenterology and internal medicine div. Classroom C., 4444 Forest Park Blvd. 286-1400.

4 p.m. Institute for Biomedical Computing and computer science joint seminar. "Modern Parallel Methods in Scientific Computing." Steven Gottlieb, prof. of physics, Indiana U., Bloomington. Room 2204 Shriner's Bldg. 362-2138.

4 p.m. Anesthesiology research seminar. "Superoxide Anion: Role in Acute Brain Injury." Dave Warner, prof. of anesthesiology, neurobiology and surgery, Duke U. Medical Center. Room 5550 Clinical Sciences Research Bldg. 362-8560.

4 p.m. Bio-organic chemistry seminar. "Novel Strategies to Combat Drug Resistant Tuberculosis." James Sacchetti, Texas A & M U. Room 3907 South Bldg. 362-3363.

4 p.m. Chemistry lecture. "Synthesis of Supermolecules With Enhanced Dipole Moments for Nonlinear Optical Applications." Douglas R. Robello, research scientist, Eastman Kodak Co. Room 311 McMillen Lab (coffee 3:40 p.m.). 935-6530.

Wednesday, April 19

8 a.m. Obstetrics and Gynecology Grand Rounds. "Molecular Diagnostic Testing for *C. trachomatis*, *N. gonorrhoeae*, and Papillomaviruses: An Historical Perspective." Richard Buller, asst. dir., molecular virology lab. and research instructor of pediatrics. Clopton Aud., 4950 Children's Place. 362-1016.

10 a.m. Anesthesiology special seminar. "Inferring Roles of SNARE Proteins in Exocytosis From Fast Kinetic Measurements on Adrenal Chromaffin Cells." Erwin Neher, Max-Planck-Institut fur

Biophysikalische Chemie. Cori Aud., 4565 McKinley Ave. 362-8560.

11 a.m. Assembly Series. Women's Society Adele Starbird and Neureuther Library lecture. "The Betrayal of the American Male." Susan Faludi, Pulitzer prize-winning author. Graham Chapel. 935-5285.

3:45 p.m. Physics colloquium. "Extreme States of Hadronic Matter." Michael Ogilvie, prof. of physics. Room 204 Crow Hall (coffee 3:30 p.m., Room 241 Compton Hall). 935-6276.

4 p.m. Biochemistry and molecular biophysics seminar. "Structure and Stability of Translational Regulatory RNA Pseudoknots." David P. Giedroc, prof. of biochemistry and biophysics, Texas A & M U. Cori Aud., 4565 McKinley Ave. 362-0261.

4 p.m. History lecture. "Medieval Heresy Into the Modern World: Cathars After Catharism." Malcolm Barber, prof. of medieval history, U. of Reading, UK, and editor, Journal of Medieval History. Co-sponsored by the medieval and Renaissance studies program. Room 113 Busch Hall. 935-5450.

4 p.m. Pulmonary and critical care's mouse genetics conference. "Reconstitution of Lymphoid Tissues Using Agonist Antibodies and Organ Transplantation." David D. Chaplin, prof. of genetics and of medicine and assoc. prof. of molecular microbiology. Room 9941 Clinical Sciences Research Bldg. 362-8983.

5:15 p.m. Mothers and Babies Research Center conference. "Role of HHF-4 in Cillogenesis and Left-right Axis Formation." Brian Hackett, asst. prof. of pediatrics. Room 36, third floor south, St. Louis Children's Hospital. 747-0739.

Thursday, April 20

Noon. Gerontology lecture. "Successful Aging." John Morley, the

Dammert Prof. of Gerontology and dir. of geriatric medicine div.,



Sports Section

Women netters win

The women's tennis team extended its streak as the Bears finished the dual-meet portion of the regular season by winning their eighth and ninth straight matches, 7-2 over Eastern Illinois University April 5 and 6-3 over Wheaton College (Ill.) Saturday, April 8. Freshman Steph Cook picked up a pair of No. 2 singles wins and added a win at No. 1 doubles against Wheaton.

Men win fifth

The men's tennis team stretched its winning streak to five matches with a 6-1 win over the University of Wisconsin-Oshkosh April 8. Arun Nanjappa was a 6-1, 6-1 winner at No. 1 singles and teamed with Max Schlather for an 8-6 win at No. 3 doubles. Mike and Pay Doyle won at No. 2 and No. 4 singles, respectively,

and teamed up at No.1 doubles for an 8-1 win.

Baseball sweeps

The baseball team has a four-game winning streak following a 14-12, 13-4 doubleheader sweep of Maryville University April 4. WU led 14-1 heading into the bottom of the fourth in game one, but Maryville posted two runs, added six in the bottom of the sixth and three more in the bottom of the seventh before WU ended the game with a double play. Jon Curd picked up his second win of the season on the hill and John O'Connell recorded his first save of the season. Freshman pitcher Trevor Young-Hyman was the star of game two as he hurled a complete-game win. He gave up four runs, three earned, on 10 hits while walking two and striking out five.

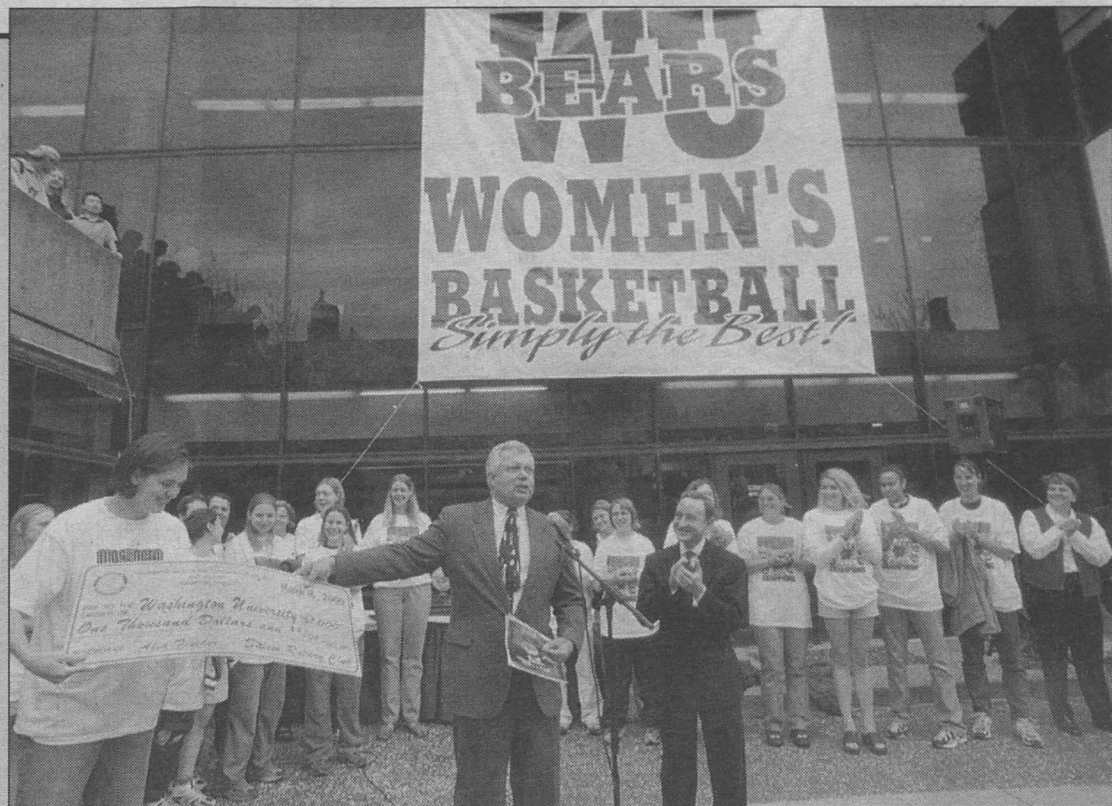
Softball wins two

The softball team continues to roll as the Bears picked up two more wins with a doubleheader sweep of Illinois College April 6 at home. Freshman pitcher Liz Smith tossed a seven-hit complete game as WU won game one, 8-2. Smith allowed no walks and just two unearned runs while striking out five. Illinois College led 1-0 after two innings, but WU scored two each in the third and fourth and added four more runs in the bottom of the sixth. Smith improved to 11-4 on the year with another complete-game win in the second half of the twin bill. She gave up seven hits and three runs—just one of which was earned—while walking one and striking out four.

Runners fifth, sixth

The women's track and field team finished tied for fifth place and the

men's team took sixth place at the Washington University Invitational April 8. Susan Chou made a provisional qualification for next month's NCAA championships, winning the 5,000 meters. Teammate Beth Peterson finished in second. Senior Claudine Rigaud earned an automatic bid to the NCAA championships with a fifth-place finish in the 200 meters and a provisional qualification with a fourth-place showing in the 100 meters. Julie Riley earned a provisional qualification after finishing second in the pole vault. On the men's side, senior Tim Julien qualified provisionally for the NCAAs by winning the 5,000 meters. Nathan Herschberger finished third in the 1,500 meters, Pat MacDonald was fourth in the 5,000 meters and Brian Sivitz was fourth in the 3,000 meter steeplechase.



Simply the best The towering banner says it all as the Washington University women's basketball team is feted for its third consecutive NCAA Division III national championship at a Bowles Plaza pep rally Friday, April 7. Senior Alia Fischer, who won the Jostens Trophy as Division III basketball's premier student-athlete, received a check during the ceremony from Jostens representative Mark Henrickson for the University's general scholarship fund. Chancellor Mark S. Wrighton joins the crowd in applauding Fischer's accomplishments.

Saint Louis U. Brown Hall Lounge. 935-4909.

4 p.m. Cardiovascular research seminar. "Advances in Contrast Echocardiography." Julio E. Perez, prof. of medicine. Room 801 Clinical Sciences Research Bldg. 362-8901.

4 p.m. Chemistry seminar. "Design and Assembly of an Energy-transducing Artificial Photosynthetic Membrane." Thomas A. Moore, chemistry/biochemistry dept., Ariz. State U. Room 311 McMillen Lab (coffee 3:40 p.m.). 935-6530.

4 p.m. Earth and planetary sciences colloquium. "Effect of Oxygen Exposure Time on the Preservation of Organic Matter in Modern Coastal Sediments." John Hedges, prof. of oceanography, U. of Wash. Room 361 McDonnell Hall. 935-5610.

4 p.m. Institute for Biomedical Computing computational genome analysis seminar. "Mouse-human Genomic Sequence Comparison." Webb Miller, prof. of computer science, College of Science, Pa. State U. Room 823 McDonnell Medical Sciences Bldg. 362-2138.

4:15 p.m. Philosophy's Herbert Spiegelberg Memorial Lecture. "Thought and Action." Charles Larmore, prof. of philosophy and political science, U. of Chicago. Room 216 Psychology Bldg. 935-6670.

5 p.m. Art history and archaeology lecture. "Raphael Peale's Blackberries: Imagination, Embodiment, and the Refusal of Selfhood." Alexander Nemerov, asst. prof. of art history, Stanford U. Room 116 Givens Hall. 935-5270.

5 p.m. Vision Science Seminar Series. "Synaptic Events That Shape the Retinal Output." Peter D. Lukasiewicz, assoc. prof. of anatomy and neurobiology and of ophthalmology and visual sciences. East Pavilion Aud., Barnes-Jewish Hospital Bldg. 362-5722.

Friday, April 21

9:15 a.m. Pediatric Grand Rounds. "Protective Effects of Human Milk." Joseph W. St. Geme, assoc. prof. of molecular microbiology and of pediatrics, dir., div. of infectious diseases, and co-leader, Infection, Immunity, and Inflammation Research Unit. Clopton Aud., 4950 Children's Place. 454-6006.

Noon. Cell biology and physiology seminar. "K Channels – Something for Cell Biology?" Colin G. Nichols, assoc. prof. of cell biology and physiology. Room 426 McDonnell Medical Sciences Bldg. 362-6950.

4 p.m. Anatomy and neurobiology lecture. Karen O'Malley, prof. of anatomy and neurobiology. Room 928 McDonnell Medical Sciences Bldg. 362-7043.

4 p.m. Hematology seminar. "The Copper Chaperones." Jonathan D. Gitlin, prof. of pathology and of pediatrics. Room 8841 Clinical Sciences Research Bldg. 362-8801.

Music

Sunday, April 16

3 p.m. Art history and archaeology concert. Classical music. Steinberg Hall Aud. 935-4519.

7:30 p.m. Faculty recital. "Virtuoso Music of the French Baroque." The Kingsbury Ensemble. Mary Wilson, soprano; William Bauer, baroque violin; and Maryse Carlin, harpsichord. Holmes Lounge, Ridgley Hall. 935-5581. See story on page 4.

Tuesday, April 18

12:15 p.m. Faculty recital. Music of Bach,

Dandrieu, Locklair and Messiaen. Barbara Raedeke, organ. Graham Chapel. 935-5581.

8 p.m. Concert. Sons of the Never Wrong, folk trio, Chicago. Cost: \$7, free for WU students, faculty and staff. Ike's Place, Wohl Center. 935-7576.

On stage

Friday, April 14

8 p.m. OVATIONS! Series. "MOMIX in Orbit." (Also April 15, same time, and April 16, 2 p.m.). Cost: \$25. Edison Theatre. 935-6543.

Sports

Saturday, April 15

2 p.m. Women's softball vs. Fontbonne College. Softball field. 935-5220.

Friday, April 21

2 p.m. Women's softball vs. Mo. Baptist College. Softball field. 935-5220.

Saturday, April 22

1 p.m. Men's baseball vs. DePauw U. Kelly Field. 935-5220.

And more...

Thursday, April 13

4 p.m. Digital Cultural Resources Group panel discussion. "Delivering Streaming Media on the WU Campus." Representatives of the music dept., libraries and general counsel's office. Room 216 Eads Hall. 935-5466.

Friday, April 14

2 p.m. Career Resource Program workshop. "To Boldly Go: Practical Career Planning for Scientists." Peter S. Fiske, author and planetary physicist, Lawrence Livermore National Lab., Livermore, Calif. Moore Aud., 660 S. Euclid Ave. 935-7355.

Saturday, April 15

Noon. Medical school retirees annual luncheon. Cost: \$13. Bevo Mill Restaurant, 4745 Gravois Ave., St. Louis. 867-2320.

Monday, April 17

8 p.m. Israeli-Palestinian dialogue. "Humanizing the Conflict: Palestine and Israel." Four specialists on Middle Eastern issues will speak. Co-sponsored by the Muslim Students' Association and the Israel Political Action Committee. Holmes Lounge, Ridgley Hall. 935-2917. See story on page 2.

Tribute

Degrees honor leaders in varied endeavors — from page 1

of arts degree in English. **Michael M. Karl, M.D.**, has practiced medicine in St. Louis for more than 50 years. He joined the faculty of the medical school in 1940 and was named a professor in 1972. After undergraduate work at the University of Wisconsin and a medical degree from the University of Louisville, Karl came to St. Louis for an internship and residency at St. Louis City Hospital. In the midst of that training, he also did a fellowship in cardiology at the medical school. He has been there in one capacity or another ever since, except for his years of military service in the South Pacific during World War II. A professor of clinical medicine, Karl went into private practice and started the West End's Maryland Medical Group in 1946, continuing in that



Bond: Addressing 2000 Commencement



Karl: Distinguished St. Louis physician



Lee: 1986 Nobel laureate in chemistry



Liberman: Revered community leader



Miss: Internationally renowned sculptor



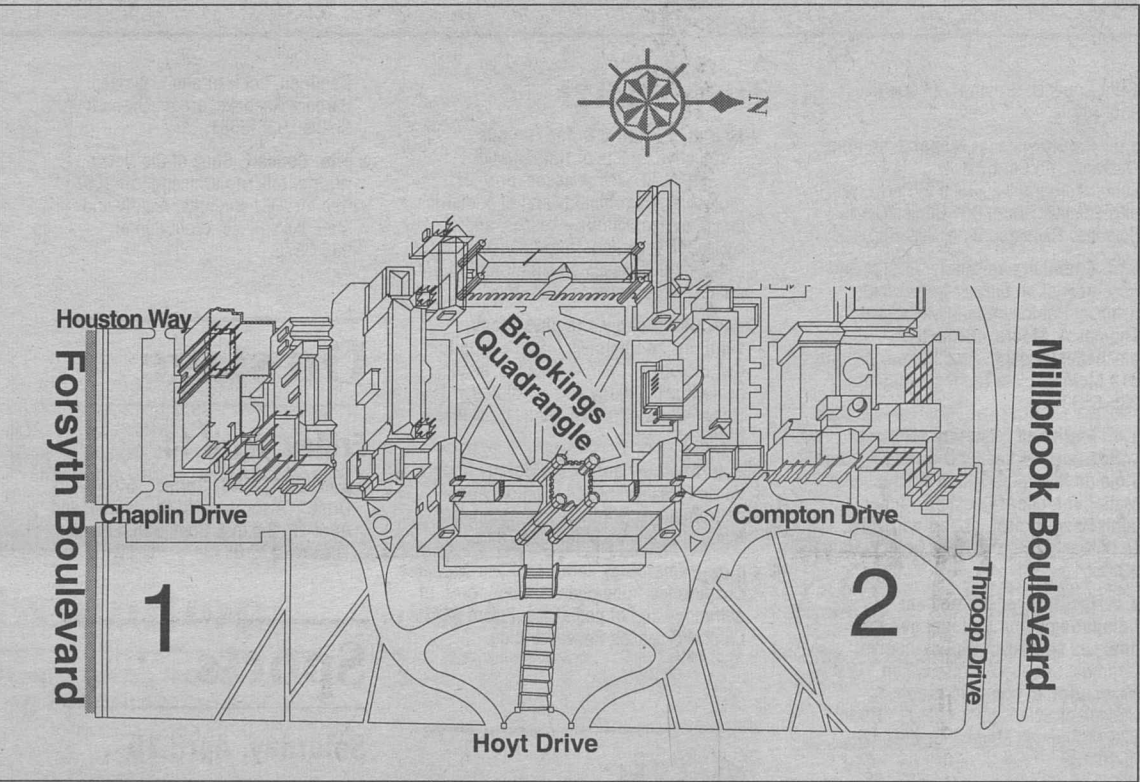
Siteman: Business leader, philanthropist

practice until 1987. Throughout those years, he maintained close ties to the medical school, Barnes Hospital and the Jewish Hospital of St. Louis. Karl and his wife, Irene E. Karl, Ph.D., research professor of medicine, were the first husband-and-wife team to have an endowed professorship established in their honor at the medical school. Karl will receive a doctor of science degree. **Yuan T. Lee, Ph.D.**, the 1986 Nobel laureate in chemistry, began his academic career in his native Taiwan and continues it there today as president of Academia Sinica, the highest government-sponsored academic

research institution in Taiwan, Republic of China. Lee also has made a lasting impact on American higher education at various prestigious institutions, and he has made seminal, far-reaching advancements in chemical reaction dynamics. Lee received a bachelor of science degree in chemistry in 1959 from the National Taiwan University and a master's degree in 1961 from National Tsinghua University in Taiwan. He pursued doctoral research at the University of California at Berkeley, where he received a doctorate in 1965 and began conducting reactive scattering experiments in ion-molecule reactions as a post-doctoral fellow.

In 1967, Lee joined a research group at Harvard, where he constructed a universal crossed molecular beam apparatus. After being appointed assistant professor at the University of Chicago in 1968, he rapidly made his laboratory the North American capital of molecular beam study. He returned to Berkeley in 1974 as a full professor and significantly expanded his research over the next 20 years. Lee will receive a doctor of science degree. **Lee M. Liberman**, chairman emeritus of Laclede Gas Co., is revered in St. Louis as a civic leader and a champion of community causes. He is a treasured member of the Washington University community as well — as a life trustee, as a former chairman and vice chairman of the Board of Trustees and, currently, as a student. He is a Ph.D. candidate in American literature and history in University College in Arts & Sciences and received a master of liberal arts degree, also from University College, in 1994. Liberman started his career at Laclede as an engineer in 1945, after graduating from Yale University with a degree in chemical engineering and serving in the U.S. Army Air Corps.

and historical insights with a sharp awareness of architectural and urban planning issues. Since the mid-1960s, Miss has created dozens of commissions that seek to promote a dialogue between public and private spaces as well as between natural and urban landscapes. Acutely aware of the responsibilities that accompany any major environmental project, Miss actively seeks community involvement while planning a work, and she encourages the public to interact with the final result. Born in New York City in 1944, Miss received a bachelor of arts degree from the University of California at Santa Barbara in 1966 and a master of fine arts degree from the Maryland Art Institute's Rinehart School of Sculpture in 1968. That same year, she created her first public projects — a pair of installations in Colorado Springs, Colo., — and would quickly find commissions in New York, New Jersey, Ohio and Connecticut. Since then, she has gone on to create works for public and private institutions across the United States and Europe. Miss will receive a doctor of fine arts degree. **Alvin J. Siteman** is chairman and president of both Site Oil Co. of Missouri and Flash Oil Corp. and president and CEO of the Siteman Organization, a major real estate developer, property manager and leasing agent. He received a bachelor of science degree in management from the Massachusetts Institute of Technology in 1948. Throughout the St. Louis area, Siteman is known and respected for his expertise in many arenas, including his keen interest in and support of the arts. He is a current trustee and immediate past president of the Saint Louis Art Museum's Board of Commissioners, and he is an advisory board member of Laumeier Sculpture Park, which he helped found. For 10 years, he was chairman of the board of Mark Twain Bancshares, and for two years of Mercantile Bank of St. Louis after the two merged in 1997. A major supporter of the University, Siteman and his wife, Ruth Levinsohn Siteman, who received a bachelor's degree from University College in Arts & Sciences in 1975, recently committed \$35 million to further the development of a major cancer center under the direction of the University's medical school and Barnes-Jewish Hospital. In recognition of the Sitemans' gift, the institutions' combined cancer programs have been named The Alvin J. Siteman Cancer Center. Siteman will receive a doctor of humanities degree.



Parking lots, indicated with a 1 and 2 on the above diagram, are being developed to replace spaces lost to construction. The University must have 5,144 parking spaces under an agreement with St. Louis County. Lot 1 is permanent, but lot 2 eventually will be a building site.

Parking

Construction on two lots near Brookings under way — from page 1

will have two entrances — one off Hoyt and the other at the corner of Throop and Compton. This lot will eventu-

ally make way for a building, possibly the proposed earth and planetary sciences building. The parking is needed to replace spaces lost to construction. Both lots will have yellow and red permit parking. "An additional 210 parking spaces are necessary to begin work on the small group housing complex at the corner of

Millbrook and Big Bend boulevards," said Richard A. Roloff, executive vice chancellor. "And we need to get started on that project in order to have it ready for students in fall 2001." The project's four buildings will house about 440 students on the former KETC site. A four-story parking garage with 450 spaces will be constructed nearby.

Employment

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

Hilltop Campus

Information regarding positions may be obtained in the Office of Human Resources, Room 130, West Campus. If you are not a WU staff member, call 935-9836. Staff members call 935-5906. **Reading Specialist** (part time) 980130 **Medical Science Writer** 980189 **Manager** 990233 **Gift Accountant** 990244 **Contract Management Liaison** 990261 **Contract Management Liaison** 990262 **Director/Executive Faculty Liaison** 990280 **Engineering Librarian** 990364

Career Development Specialist 990374 **Counselor** 000014 **Regional Director of Development** 000057 **LAN Engineer** 000094 **Library Assistant** 000099 **Secretary/Technical Typist** 000102 **Head of Access** 000116 **Assistant University Webmaster** 000118 **Supervisor, Help Desk and E-mail Administration** 000144 **Assistant Director, Management Systems** 000149 **Administrative Coordinator** 000160 **Lab Technician III** 000168 **Communications Technician I** 000188 **Researcher** 000190

Research Assistant 000191 **Seismic Data Analyst** 000203 **Department Secretary** 000209 **Researcher** 000212 **Accountant** 000220 **Department Secretary** 000222 **Assistant Director of Admissions** 000224 **Sales Associate (part time)** 000229 **Manuscripts Cataloger (temporary)** 000230 **Systems Manager** 000239 **Manager of Employer Relations** 000240 **Lab Technician III** 000241 **Administrative Aide** 000244 **Residential College Director** 000248 **Department Secretary** 000251

Associate Director of Capital Projects 000253 **Research Technician** 000256 **Contract Management Liaison** 000258 **Administrative Coordinator, External Relations** 000259 **Administrative Secretary** 000261 **Watchman (licensed)** 000262 **Admissions Assistant** 000266 **Customer Assistance Clerk** 000267 **Administrative Assistant** 000268 **Deputized Police Officer** 000272 **Administrative Assistant** 000273 **Research Assistant** 000274 **Library Technical Assistant** 000275

Payroll Services Representative 000276 **Manager of Systems Support and Development** 000277 **Administrative Assistant** 000278 **Assistant Director of the Writing Program (part time)** 000279 **Administrative Receptionist** 000280 **Sponsored Projects Specialist** 000281 **Lab Technician** 000284 **Assistant Manager (part time)** 000285 **Web Team Leader** 000286 **Medical Campus** This is a partial list of positions at the School of Medicine. Employees: Contact the medical

school's Office of Human Resources at 362-7196. External candidates: Submit resumes to the Office of Human Resources, 4480 Clayton Ave., Campus Box 8002, St. Louis, MO 63110, or call 362-7196. **Professional Rater (part time)** 000299 **Research Technician** 001003 **Insurance Billing and Collections Assistant II** 001056 **Research Lab Supervisor** 001233 **Medical Secretary I (part time)** 001272 **Staff Scientist** 001358 **Research Technician II** 001385 **Secretary III** 001421 **Research Patient Assistant** 001548

Campus Watch

The following incidents were reported to University Police from April 3-9. 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 rescomp.wustl.edu/~wupd.

April 4

3:24 p.m. — A student reported the theft of his mountain bike, valued at \$500, from a rack on the east side of Hitzeman Residence Hall. The student had secured the bike to the rack by a cable lock, which had been cut and left on the ground.

April 7

12:37 a.m. — A Spann employee observed four young males attempting to take a brown leather chair from Holmes Lounge. The employee provided a description and license number for the vehicle in which the men left the scene. One subject has been identified.

April 9

6:07 p.m. — A fire broke out in the Compton Hall Electron Microscopy Lab when an extension cord short-circuited, melted and fell onto a pile of poster board and photographs. A postdoctoral student working in an adjacent lab heard the smoke detector, called the fire department and brought the blaze under control with a fire extinguisher. Damage was chiefly limited to smoke and fire extinguisher residue.

University Police also responded to five additional reports of theft, two additional bike thefts, two auto accidents, one report of vandalism and a suspicious person.

Notables

Jane Aiken is named Carnegie Scholar

Jane H. Aiken, J.D., LL.M., professor of law, has been named a Carnegie Scholar in the Pew National Fellowship Program. She is one of 40 college and university faculty members nationwide who will participate in the two-week Carnegie Academy for the Scholarship of Teaching and Learning in Menlo Park, Calif., in June.



Aiken: One of 40 honored nationwide

The annual program, which includes a \$6,000 stipend, supports the work of distinguished faculty who are contributing to an emerging field of teaching and learning. It is designed to bring together participants from various disciplines to share their ideas and to spur continued intellectual exchanges.

Aiken will explore how law professors can teach students to broaden their world views by questioning basic assumptions and recognizing how the students' legal problem-solving is shaped by their life experiences. Her research will tie into her recent law review article "Striving to Teach Justice, Fairness and Morality," which focused on the role law professors should play in

teaching how experience and values affect the delivery of justice.

"Lifetime lessons happen when students begin to understand that all they see is fundamentally shaped by their world point of view," Aiken said. "My focus will be on what teaching interventions most help students to see that their assumptions may not be generally accepted either among the clients they serve or by others working in separate but related disciplines. The study of law should encompass teaching students how their perspectives affect their decision-making, and ultimately the delivery of justice in the legal system."

Aiken plans to further develop and test this "transformational learning theory" through her ongoing efforts to create collaborations between law and social work students in the JD/MSW joint-degree program and the law school's Civil Justice Clinic.

"The clinic and joint-degree courses will provide a wonderful laboratory for me to compare ways to create 'disorienting moments' in which students can examine their assumptions about the world and about the differing approaches of law and social work," Aiken said. "Such moments will enable students to better understand how to achieve the best outcome for their clients."

Of note

Graduate architecture students **Karl Gustafson** and **Matt McHugh** recently won first place as a team in the School of Architecture's 2000 James Walter Fitzgibbon Sketch Competition. The all-school theoretical competition called for a prototypical University campus marker to announce the presence of the University to the community and city, and to mark significant boundaries of the campus. The winning entry displayed the University's name on a rectangular sign of tempered frosted glass with steel tubing and a steel plate cutting through the top portion of the sign for added visual emphasis. Seniors **Chris Sensesenig** and **Christina Yaron** received second place, and graduate student **Gauri Shah**

came in third. ...

Rebecca Messbarger, Ph.D., assistant professor of romance languages and literatures in Arts & Sciences, recently received a \$30,000 fellowship for the 2000-01 academic year from the National Endowment for the Humanities to support the first book-length study of the life and work of 18th-century Bolognese artist and anatomist Anna Morandi Manzolini. Titled "Waxing Poetic: The Life and Work of Anna Morandi Manzolini," the study, which has also received support from the American Philosophical Society, traces Morandi's intellectual trajectory from provincial artist to internationally renowned anatomist; places her work both within the contemporary cultural and historical context, as well as within the tradition

of anatomical studies and design; and seeks to decipher the intertwined physiological theories and poetics of biology she inscribed in colored wax. ...

George I. Zahalak, Eng. Sc.D., professor of mechanical engineering and of biomedical engineering, was awarded the 1999 Richard Skalack Best Paper Award by the American Society of Mechanical Engineers' (ASME) Bioengineering Division. Zahalak's paper was titled "The Effects of Cross-Fiber Deformation on Axial Fiber Stress in Myocardium." Co-authors are Vincent de Laborde and Julius M. Guccione, Ph.D., assistant professor of biomedical engineering. Zahalak is the only person to win the ASME Bioengineering Division's best paper award twice, having won previously for a 1990 paper.

Jenkins new sports information director

Keith Jenkins has been named sports information director, according to M. Fredric Volkmann, vice chancellor for public affairs. Jenkins replaces Kevin Bergquist, who left in March to take a position with the National Kidney Foundation in Ann Arbor, Mich., after serving as director for nearly two years.

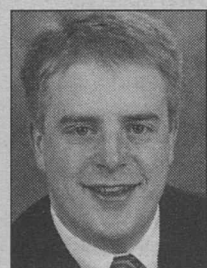
A native of Marion, Ohio, Jenkins is responsible for promotion and publicity of the University's 18 NCAA Division III varsity athletic programs.

Jenkins had served as assistant sports information director since August 1998, overseeing promotion of the University's nationally prominent intercollegiate women's programs, including the 1999 and 2000 NCAA Division III women's basketball national champions. He also handled publicity for NCAA quarterfinalists in women's

volleyball and women's soccer, both in 1998, as well as national qualifiers in men's and women's cross country, swimming and diving, track and field, and women's tennis.

Cited by the College Sports Information Directors of America for excellence in publications, Jenkins contributed to seven media guides and programs that received national honors in 1998-99. The Bears' men's soccer media guide was voted best in the nation, Division C; the football and women's basketball game programs received second in the nation nods; the women's basketball and women's volleyball guides were third in the nation; and the men's basketball and women's soccer media guides were fourth in the nation.

Jenkins graduated from Northwestern University in 1997 with bachelor's degrees in economics and communications. In 1997-98 he worked in the athletic media relations office at Northwestern, serving as the primary media contact for men's and women's soccer, men's and women's swimming, women's fencing, wrestling and softball.



Jenkins: Promotes 18-sport program

DASI

EE students to launch advanced imager

— from page 1

remote-control vehicle, to make observations.

Smith is developing a proposal to NASA to include the imager on a mission to Pluto and beyond the solar system to look back at the Earth in a search for life in the only place we know it to exist.

"A way to determine if we know how to find life is to show that Earth can be detected by a

spacecraft moving farther and farther away from Earth," Smith explained.

The image of Earth acquired by the DASI eventually could be compared to that of another distant planet outside the solar system. If these images are similar, there could be a cause to believe that the planet is similar to Earth.

The launch of the student rocket package is a first step into space for DASI technology. Snyder said that there's more riding on the NASA rocket than the DASI and the students' semester grades. "The DASI has not yet been tested for durability under the stress of rocket launching," he explained.

"The class project is the first such test, so, in addition to being an unusual educational opportunity, the project is one that is integral to the space program and NASA's future plans."

The information the DASI obtains on this suborbital flight will come entirely from within the canister the students are building. Inside, an image will be formed using light-emitting diodes and fiber-optic lines, forming a test pattern during the flight. The DASI camera will get about 100 images of the test pattern.

"We anticipate that the DASI images of the test pattern will remain stable throughout this first

flight," said Smith.

Snyder said the course is designed to ensure that all students interact with each other, so the end result is very much a team effort. "Each of the five groups of students works on a specific subsystem, but the groups interact strongly because the subsystems must work together to accomplish the mission," he said.

Jasenka Benac, a senior electrical engineering major, has spent the semester working with classmate Dawei Wang on the power supply, the test pattern and the initiation transducer, an electronics component that initiates the data collection.



Triage, EST-style Sophomore Kavita Vakharia, a member of the Emergency Support Team (EST), attends to "injured" Rachel Kunce as part of the EST Disaster Drill Sunday, April 9, in and around Bixby Hall. Representatives of the Clayton and St. Louis fire departments and University Police viewed the annual drill, which enlisted the realism-heightening efforts of the 375th Moulage Team from Scott Air Force Base, Ill., and more than 25 "victims." EST is a 44-member volunteer student organization that provides free and confidential 24-hour emergency medical care to the University community.

Seven graduate students earn research honors

Seven Washington University graduate students took home honors from the fifth annual Graduate Student Research Symposium held April 1 in Holmes Lounge.

First and second prizes went to students in each of three categories — sciences, social sciences and humanities. First-place winners received \$150 apiece, and second-place winners received \$100.

The winners, their departments and the titles of their presentations are:

Sciences:

• First: Melanie L. Leitner, doctoral student in molecular biology and pharmacology, for "What Do Neuronal Survival

Proteins Have to Do With Breathing? Or the Role of the GDNF Family in the Function of the Cartoid Body";

• Second: Li Ern Chen, a medical student in pediatric surgery, for "Laparoscopic vs. Open Surgery for Malrotation Without Volvulus";

Social sciences:

• First: Julia Hohberger and Tiffany Tibbs, doctoral students in psychology in Arts & Sciences, for "Differences in Cancer Fatalism by Race and Religious Affiliation";

• Second: Crickette Sanz, doctoral student in physical anthropology in Arts & Sciences, for "Fecal Testosterone and Corticosterone Levels and Behavioral Correlates in a Group

of Five Captive Chimpanzees";

Humanities:

• First: Michael A. Rutz, doctoral student in history in Arts & Sciences, for "The British Zion: Evangelization and Political Culture in Britain and the Empire, 1790-1840"; and

• Second: Monica L. Wright, doctoral student in Romance languages and literatures in Arts & Sciences, for "The Narrative Function of Clothing in the Romances of Chretien de Troyes."

The symposium is open to all graduate students here and gives participants the opportunity to present their research to other members of the University community. Thirty students made poster presentations.

"This class was different from any other design class in that it pulled everything I've learned together, from different sources," Benac said. "It gives you a sense of how things work in the real world. We started from scratch and did everything from research to decision-making, and we had a real deadline. In most design classes, you're either right or wrong with the design, but in this case, there was no model, so you're more on your own in finding the right answer. I learned much more than electrical engineering — including optics and mechanical engineering. It's been a great experience."

Washington People

If you think engineering is best described as dry and technical, you're probably not alone.

Rose Brower, associate dean for engineering communications in the School of Engineering and Applied Science (SEAS), is intent on changing that perception, however. Adding dazzle to SEAS publications and presentations has been her mission for almost eight years.

Brower's century-old office in the basement of Cupples II Hall is a think tank of sorts for various publications, proposals, multimedia shows and other projects that Dean Christopher I. Byrnes, Ph.D., finds strategically important to the school. Brower works with a variety of people to capture and communicate the excitement of engineering at Washington University.

Variety has typified her career path. As a high school junior, Brower researched criminal psychology for a debate topic and became interested in it. She completed a bachelor's degree in



Rose Brower and Christopher I. Byrnes, Ph.D., dean of engineering, pore over slides for a presentation.

Bringing out the dazzle in engineering

Projects bloom in Rose Brower's communications 'think tank'

By TONY FITZPATRICK

the field in 1975. "Early on," Brower said, "I thought about working for the FBI — I loved the study of forensics and psychology. I even tried an internship as a probation officer but decided to redirect my energies elsewhere."

Two years later, fresh out of Lewis University in Lockport, Ill., with a master's degree in labor relations, she returned to the St. Louis area and landed a job with Western Electric in 1978. Over the next 10 years, while Western Electric became incorporated into AT&T, Brower maneuvered her way through a management development program and took on a staggering 17 different job assignments.

At Western Electric and later AT&T, Brower was hired to respond to affirmative action and equal employment opportunity complaints. She was promoted to supervise the engineering side of the organization, became a shop foreman and then data center foreman in the repair and distribution center. She moved on to become a sales and marketing representative for outside plant products and was promoted to tackle various financial operations after divestiture. Some of the departments she oversaw employed more than 200 people. She served as a member of the financial operations consolidation team, a trying and often disheartening role in which she found herself involved in reshuffling more than 1,200 employees.

A key theme to Brower's career is crisis management and operational organization. She often found her assignments in areas where departments were foundering and needed quick direction.

Bringing out the best

"If I had to define what I do best it would be project management," she said. "I enjoy bringing out the very best in people and their organizations. At AT&T I worked with a great variety of professionals, including engineers, union employees and clerical staffs." Wherever her assignment took her, she said, she would "talk with the people to define the problem, then organize the department so that the operation would be back and performing to its capacity. I learned that outstanding performance is directly linked to team morale, which is built from fair and consistent management practices. From this point of view, AT&T honed my ability to organize complex projects and direct people to do their best work."

The company also put Brower on the road a lot. By the end of the 1980s, she was logging over 250,000 air miles annually. The job was becoming increasingly difficult to manage along with single-parenting her preschool-aged son, Patrick. So, she left AT&T and came to work at the University's School of Technology and Information Management (STIM).

STIM offered a series of educational programs that reached out to local corporations and industries in information technology, a booming area then and now. Brower marketed seminars and academic programs and built relationships with area companies. She started to develop her own communications materials — handbooks, brochures and other sales aids, which,

place over 18 months, involving 13 faculty retreats and five National Council meetings. It has served since as a blueprint for the school's advances and as a magnet for fund raising in the Campaign for Washington University.

"Getting that show pulled together was a major learning curve," Brower said. "I learned to appreciate the value of an engineering education firsthand. I learned to think more strategically under the guidance of Chris Byrnes, and I couldn't have conquered the technology without the help of Bill Darby [now associate vice chancellor for students] and Keith Bennett." Bennett is affiliate assistant professor of computer science.

"Hiring Rose Brower in our school was clearly the right thing to do ... SEAS needed to develop a clear message about the excitement of engineering at Washington University."

CHRISTOPHER I. BYRNES

as it happened, helped her develop into the communications expert she is today.

In 1992, STIM was consolidated within SEAS, and Brower wondered what her future was at the University. Though she nervously anticipated an interview with Byrnes, her anxiety turned out to be unnecessary.

"Hiring Rose Brower in our school was clearly the right thing to do," Byrnes said. "We thought that SEAS needed to develop a clear message about the excitement of engineering at Washington University."

In August of 1992, Brower became SEAS director of communications. Since then, she has been promoted, first to assistant dean for engineering communications and then to associate dean in 1998.

Brower recalled her first "crunch" project, a multimedia presentation to the Board of Trustees in March of 1995. It was her first experience with PowerPoint software and a broad range of media, not to mention engineers of every cloth with areas of expertise vastly different from each other. Beyond visuals, she had to incorporate an annual report and worked with Byrnes, the faculty and staff to craft the school's strategic plan. Development of the plan, titled Project 21, actually took

In another major project, Brower collaborated with 13 engineering and medical school faculty on an elaborate multimedia presentation to representatives of The Whitaker Foundation.

There was a lot riding on the presentation and the site visit. Since 1975, The Whitaker Foundation has awarded more than \$450,000,000 to colleges and universities toward programs to improve human health through biomedical engineering. The school's biomedical engineering department, headed by Frank C-P Yin, M.D., Ph.D., has been an established department only since 1997, but it's one with recognized research expertise. Yin and Byrnes viewed support from The Whitaker Foundation as vital to enhance the department's already notable reputation.

The site visit was June 2, 1999. After touring both the Hilltop and Medical campuses and laboratories, the Whitaker team attended presentations by Yin, Byrnes and other selected biomedical engineering faculty.

Under Yin's leadership, Brower had worked with the faculty to present a focused and technically seamless message for the event. "It was a big success, and actually great fun," Brower said. "A lot of data

gathering, converting files and images into a common format, and earning the trust of all the different people were essential for the project's success — I got to see Washington University collaboration at its best."

All the hard work paid off. In the fall, The Whitaker Foundation announced that it had awarded the biomedical engineering department \$13 million, \$10 million of which will be used to help build a new biomedical engineering building on Hoyt Drive.

Sometimes a project will transcend its original purpose and take on a life of its own. In one instance last year, David A. Peters, Ph.D., mechanical engineering department chair, was installed as the McDonnell Douglas Professor of Engineering in a Holmes Lounge ceremony. Brower collaborated with Peters on a presentation titled "Boomers, Bloomers and Zoomers," which was so powerful, moving and visually compelling that hardly a pair of eyes left the big screen. Since then, Peters has found that the talk has "legs." He has presented it by invitation to some 10 different audiences, and the text appeared in the April 1, 1999 issue of "Vital Speeches."

Time with Patrick

Interacting with seven different engineering departments, their faculty, alumni and staff keeps Brower engaged, but she always has time for her son. Patrick is 16 now and a sophomore at Clayton High School. At almost 6 feet 6 inches tall, he plays basketball and baseball for Clayton during the school year and both sports for other teams in the summer. His dream is to become a major league baseball player, and Brower does all she can to help him achieve it. She spends evenings, weekends and "summer vacations" — a term she uses with wry humor — attending as many games as she can. They also have fun with the family dog, Buster.

"I have been blessed; God has guided me to the right projects at the right times," Brower said. "The biggest satisfaction I get at Washington University is to serve its faculty and staff. They're very committed to improving society and sharing their time unselfishly. Their capacity for giving is unique. I admire them, especially now, when many professionals seem to worry only about their own personal gain. Whatever I can do to help promote the strategic objectives of the school, I will, because its mission is important to the future for every one of us."

Rose Brower

Education B.S., criminal psychology, 1975; M.S., labor relations, 1977

University position Associate dean for engineering communications

Family Son, Patrick, 16

Hobbies Sports, community service, reading and music