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Record

WASHINGTON
UNIVERSITY
IN ST. LOUIS

Vol. 21 No. 25 March 27, 1997



Admissions sets applications record; 1,000 visitors expected

Student Admission Committee members freshman Lanee Williams, left, and junior Elisa Haidt prepare for April Welcome with pins and smiles. The annual monthlong event is expected to bring nearly 1,000 prospective students to campus next month to sample life at Washington University. (See story on page 6.) The Office of Undergraduate Admissions this year received an all-time record of nearly 14,000 applications for admission, a 23 percent jump in applications from last year and a 79 percent increase over the past three years. The University's success in its admissions efforts comes as application numbers generally are flat or dropping at other universities. In individual categories, Washington University's application numbers also are up from last year, including early decision applications (up 20 percent), African-American student applications (up 41 percent), and international student applications (up 35 percent).

'Virtual' spring break

Geology class studies Mojave Desert — via computer and on foot

If the 22 students in "Focus 214" felt a twinge of déjà vu when they toured the Mojave Desert during spring break, there was more than a psychological explanation for the feeling.

Prior to their March 1 departure for the Mojave, the students took many "virtual" tours of the desert environment. Using computer workstations in McDonnell Hall, they were able to "visit" the fieldwork sites before traveling there during spring break.

With the help of computers supplied by the Hewlett Foundation, a software program called TRUVUE and a simulated flight program, the students zoomed over the region's dunes, valleys, dry lakes and canyons via cyberspace. The simulated flight program was developed by Becky Eby, a graduate assistant in earth and planetary sciences in Arts and Sciences.

The experience, said Raymond E. Arvidson, Ph.D., professor and chair of the Department of Earth and Planetary Sciences, is a forerunner of future fieldwork.

"During spring break, we prototyped the future of fieldwork," said Arvidson,

teacher of the "Focus 214" course. "The students were able to use virtual reality to map and 'visit' key areas."

The pre-journey software and data the students used is called a Geographic Information System, a series of computational tools that allowed them to combine NASA Landsat satellite images and other data with topographical data. Each pixel of the topographical data contains the longitude, latitude and height features of a particular region or place. This also is the kind of technology Arvidson and other planetary scientists have been using to image and study the planets of the inner solar system.

Once in the field, the students determined the accuracy of their virtual geographic predictions by using a global positioning system, which is a laptop-sized instrument with an antenna that signals satellites in orbit. Once the global positioning system finds at least three satellites within its range, a readout of the location — plus latitude, longitude and elevation — flashes across the computer screen.

Comparing and contrasting the virtual

with the physical was one of the key aspects of the semester project for "Focus 214," which also requires that every student write a substantial research report on the ecological, geological and land-use policy aspects of the desert region. The class is a precursor to the Hewlett Program Sequence, a two-year program of integrated studies for freshmen and sophomores that fosters independent thinking and exploration of a subject from different perspectives. The program is funded by the William and Flora Hewlett Foundation and formally begins next fall.

This spring, students focused on the geology, ecology and land-use practices and policies associated with California's Mojave Desert, an area Arvidson and Washington University colleagues have explored previously for other purposes. A part of the area the class visited has been turned into the Mojave Natural Preserve, an entity of the National Park Service that previously was overseen by the Bureau of Land Management.

Continued on back page

William Gass wins major literary award

For the second year in a row, a Washington University faculty member has won a National Book Critics Circle Award. William H. Gass, Ph.D., the David May Distinguished University Professor in the Humanities and director of the International Writers Center in Arts and Sciences, won this year's National Book Critics Circle Award in the criticism category for his book "Finding a Form." Last year, the late Stanley Elkin posthumously won the award in the fiction category for his novel "Mrs. Ted Bliss."

Elkin, Ph.D., was the Merle Kling Professor of Modern Letters in Arts and Sciences until his death in May 1995.

Both Gass and Elkin are two-time winners of the award. Gass won the 1985 National Book Critics Circle Award in the criticism category for "Habitations of the Word." Elkin won the 1982 award in the fiction category for "George Mills."

This year's winners in the criticism and four other categories were announced at a ceremony March 18 in New York City. The National Book Critics Circle Award is considered one of the most prestigious honors in literature — on a level with the Pulitzer Prize and the National Book Award.

Gass, who was unable to attend the ceremony, said in a written statement: "A few years ago, a book of mine was honored by the National Book Critics Circle, and on that occasion, too, a previous commitment made it impossible for me to attend the award ceremony. Thinking back on my record regarding such things, I realized that when I attended the ceremonies, I became what is called 'a finalist,' but when I was unable to be there, I sometimes 'won' by a syllable or so down the stretch. I must apologize to my fellow finalists because my absence ... has given me an unfair advantage."

"Naturally, I understand why I have received this award. In the very book in question, I have an essay (often, it appears to be the only one anybody's read) which complains that many prize-giving panels (not the National Book Critics Circle, of course) 'take dead aim at mediocrity and always hit their mark.' My punishment is plain. I shall try to do better next time."

"If there is a next time. If there is a next time, I promise to come to the ceremony even if on that night I've been

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The Performing Arts Department in Arts and Sciences will stage the vaudevillian work "Cabaret"

School of Medicine scientists complete map of chromosome X

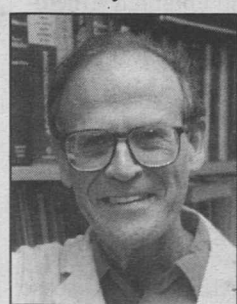
School of Medicine researchers have reached a milestone in the history of genetics — the completion of a high-resolution map of chromosome X. The map was published in this month's issue of Genome Research.

The map has 2,100 unique landmarks — three times as many as any previous X chromosome map. If it were a road map from St. Louis to San Francisco, it would show a marker every mile.

The researchers also located hot spots for genes and detected a large region where the DNA remains intact as it passes from one generation to another.

The map is speeding the search for

disease genes on X, which is associated with many inherited disorders. "And the



David Schlessinger

completion of a map with this level of detail has made X one of the earliest chromosomes for DNA sequencing — the next phase of the Human Genome Project," said David Schlessinger, Ph.D., director of the

the X project. Ramaiah Nagaraja, Ph.D., research instructor in molecular microbiology, is the paper's lead author.

Chromosome X determines gender — women have two copies and men have one X and one Y. X's DNA is one long double helix — 160 million nucleotide base pairs. On average, the new map has a landmark every 75,000 base pairs. The national goal for chromosome mapping is one landmark every 100,000 base pairs.

Whereas someone mapping a road could drive along the route and record landmarks in sequence, the researchers

Continued on back page

Medical Update

Executive Faculty establishes new compensation system

The Executive Faculty of the School of Medicine has approved a new schoolwide policy for faculty compensation. The policy establishes an incentive-based compensation system for all of the school's investigator-track and clinician-track faculty members.

Under the new policy, each department will develop its own compensation plan aimed at recognizing excellence in teaching, research and clinical care. Individual faculty members will be compensated according to the provisions of his or her department's plan.

"Our faculty members play the essential role in maintaining the school's tradition of excellence in patient care, teaching and research," said William A. Peck, M.D., executive vice chancellor for medical affairs and dean of the medical school. "This new policy is designed to help the school remain competitive in supporting its current faculty and in recruiting individuals of the highest caliber."

The new policy was developed by an Executive Faculty subcommittee headed by Ronald G. Evens, M.D., the Elizabeth E. Mallinckrodt

Professor of Radiology, head of the Department of Radiology and director of Washington University's Mallinckrodt Institute of Radiology. In addition to Evens, the subcommittee was made up of Alex S. Evers, M.D., the Henry Eliot

Mallinckrodt Professor of Anesthesiology, head of the Department of Anesthesiology and professor of medicine and of molecular biology and pharmacology; Henry J. Kaplan, M.D., professor and head of the Department of Ophthalmology and Visual Sciences; Philip D. Stahl, Ph.D., the Edward Mallinckrodt Jr. Professor of Cell Biology and Physiology and head of the department; Emil R. Unanue, M.D., the Edward Mallinckrodt Professor of Pathology and head of the department; David C. Van Essen, Ph.D., the Edison Professor of Neurobiology and head of the Department of Anatomy and Neurobiology; and Samuel A. Wells Jr., M.D., the Bixby Professor of Surgery and chair of the department.

The policy does not apply to emeriti faculty, research-track appointments or research scientist appointments.

Every faculty member covered by the policy will be paid, at minimum, a base salary established by his or her department. In addition, departmental plans can

allow individuals to receive supplemental compensation to reflect performance in clinical, teaching, research and administrative activities; professional or community service; and other factors.

The school policy requires base salaries to be at least \$55,000 for associate professors and \$70,000 for full professors. When setting base-salary levels, departments may adopt these levels or establish higher levels tied to compensation data from the Association of American Medical Colleges. The \$55K/\$70K minimum base-salary levels are not subject to reduction by department heads.

"The new compensation policy gives departments considerable flexibility to set their own compensation levels," Evens said. "This arrangement helps ensure that each departmental plan can be designed to meet the needs of the department and its faculty."

At the same time, the school policy provides several universal criteria that all departmental compensation plans must meet. It requires that departmental plans comply with University tenure policy, be established in writing, and be designed to

reward excellence in teaching, research and clinical activities, Van Essen said. In addition, departmental plans must include regular reviews of faculty members' performance. Departments must spell out the performance standards expected of faculty members and explain how faculty assessments

"The new compensation policy gives departments considerable flexibility to set their own compensation levels."

— Ronald G. Evens

will be conducted.

Each department will work independently to develop and implement its own compensation plan, Evens said. Departmental plans will be reviewed and approved by the University's Office of the General Counsel, the Executive Faculty Administration and Finance Committee and the medical school's dean. Departments should complete their plans and have them approved no later than June 30, 1998.

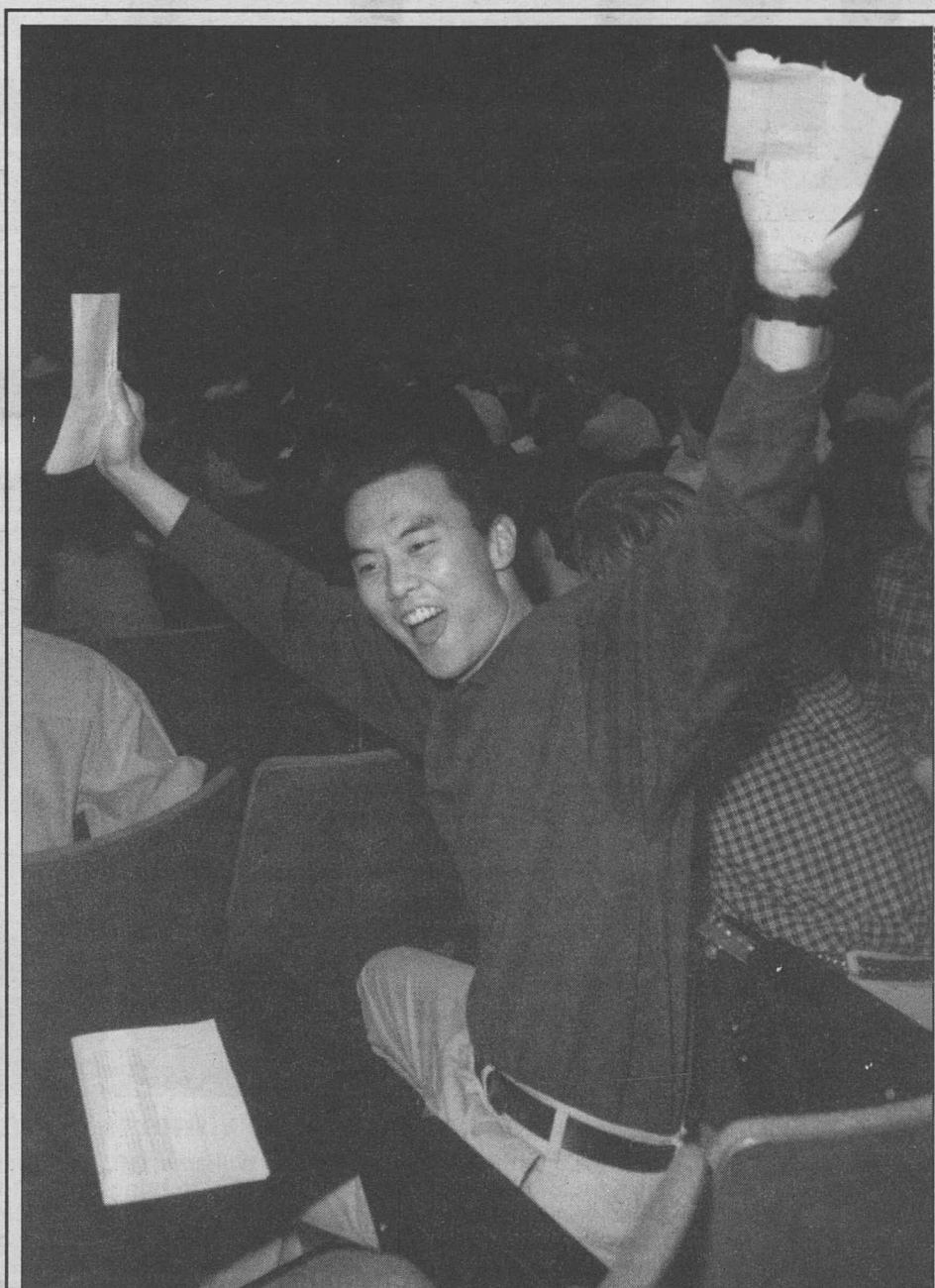
Once a departmental plan is approved, it will go into effect immediately unless the department requests and is granted a later start date, Evens said. At their start date, most departments will enter a three-year transition period during which reductions in total compensation — if they occur — would be limited to 5 percent a year. At the discretion of the Administration and Finance Committee, some departments may be allowed to start their transition periods retroactively if they can

medical research scientists, though the general public also is welcome. Topics include an overview of Alzheimer's disease, its oxidative damage to nerve cells, risk factors, experimental models, and the amyloid hypothesis of the disorder. Speakers will come from across the country.

Berg graduated from Washington University in 1945 and obtained a medical degree from the School of Medicine in 1949. He joined the faculty in 1955.

Since 1979, he has headed federally funded studies that compare aging in healthy subjects with persons with dementia. The Healthy Aging and Senile Dementia program has set international standards for evaluating patients with Alzheimer's disease.

Berg has received Alzheimer's Disease Research Center grants from the National Institute on Aging since 1985. The funding has supported a wide range of



Matching up

Fourth-year medical student Brian Kwon reacts to his match on Match Day, which was March 19. This year on Match Day, Kwon and 13,553 other senior medical students in the United States learned which residency programs they will enter. Kwon will conduct his residency at University Hospitals of Cleveland, where he will train in orthopaedic surgery.

demonstrate that they already have been operating under an incentive-based plan that complies with the schoolwide policy.

"This policy will help the School of Medicine maintain the highest possible levels of compensation in the rapidly changing environment of clinical and academic medicine," Evens said.

The policy was developed after a careful review of compensation systems at comparable medical schools, he explained. Clinical departments at several of these schools already have incentive-based pay systems similar to the new Washington University policy, and a number of additional schools are considering such policies.

The compensation policy will work in concert with the medical school's Practice Plan, a broad initiative aimed at improving service to patients, said Peck. For example, one goal of the Practice

Plan is to establish patient-care performance standards for clinical faculty. It is anticipated that departments will incorporate these performance standards into the assessment component of their compensation plans.

— Juli Leistner

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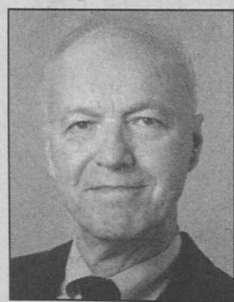
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Symposium on Alzheimer's disease honors Leonard Berg

The first Leonard Berg Symposium on Alzheimer's Disease will be held at the School of Medicine on April 4, from 7:30 a.m. to 4:45 p.m. in the Eric P. Newman Education Center, 320 S. Euclid Ave. A reception will follow.

The symposium honors Leonard Berg, M.D., professor of neurology, who will



Leonard Berg

step down from his position as director of the Alzheimer's Disease Research Center on May 1. It recognizes his contributions to the care of Alzheimer's patients and their families and to the scientific search

for a solution to this condition. The symposium is designed for physicians, allied health professionals and

Washington People

Kropp embraces total quality — totally

It's no wonder that Dean H. Kropp, Ph.D., knows total quality when he sees it. After all, he teaches the ideals of quality management as they relate to manufacturing and service firms, and he instructs the "Total Quality Schools" course, a program in which Washington University students help area public schools use Total Quality Management principles to improve their effectiveness.

The marvel is the way Kropp, associate dean and the Dan Broida Professor of Operations and Manufacturing Management, practices what he teaches at the John M. Olin School of Business.

He said having fun and working hard are keys to success. The blend seems to work for him — students have rated him "Teacher of the Year" not only for 1996 but for seven of the last eight years. Beginning with the first course he taught at the business school in 1986, Kropp has won acclaim for his lecturing, accessibility and overall teaching.

"He has tremendous energy and passion for teaching, which clearly comes through in all of his classes," said Cynthia Meiners, who earned a master's degree in business administration (MBA) in 1988. "He helped me see that the quest for quality is about more than computer systems and algorithms. It's about people and mostly about leadership. He makes his classes come alive by applying them to real-world companies and situations."

These skills serve Kropp well in teaching venues worldwide. He has been a visiting professor at the European School of Management in Paris, and he now teaches in special management programs at Stanford University and at the Institute for Management Development in Geneva, Switzerland.

His consulting clients — companies he's advised in production planning, inventory control, quality management, manufacturing strategy and business policy — include Anheuser-Busch Cos. Inc.; Campbell Soup Co.; McDonnell Douglas Corp.; the Swedish rolling-bearing company SKF Group; and Unilever Group, a \$50 billion British-Dutch company that includes Lever Brothers, Ragú Pasta Sauces and Chesebrough-Ponds. These companies and their leaders have benefited from Kropp's research and his grasp of issues affecting their industries.

Another beneficiary is MEMC Electronic Materials Inc., a world-leading supplier of silicon wafers from which microprocessors, memory chips and other semiconductors are made.

"In 1987, when I was plant manager at MEMC in St. Peters (Mo.), I asked Dean to help our plant improve its performance," said Ralph D. Hartung, now president of MEMC/Europe. "And he really helped us move from traditional manufacturing to manufacturing excellence. Sometimes it is hard to keep a clear vision of where you need to go while dealing with many day-to-day issues, so it was invaluable to me to have a good counselor such as Dean."

At the business school, Kropp balances administration and research. He's played a pivotal role in many new programs. He is academic co-director of the new executive master's of manufacturing management degree program; he helped revise curricula for the professional and full-time MBA programs; and he helped develop the "Total Quality Schools" program. He's also been a practicum adviser nearly every semester, and he still finds time to sustain a program of research on operations management with business school colleagues and doctoral students.

What keeps Kropp going?

"Variety," he said. "I'm really a jack-of-all-trades. I'm not the best teacher, the most prolific researcher, the busiest consultant or the most service-oriented — but I try to be one of the best in all those areas. I like variety, and I believe in balance. I don't ever do one thing to the exclusion of all others. I believe research, consulting and teaching enrich each other."

'A mind of his own'

Born and raised in St. Louis — University City, to be exact — Kropp grew up in a family that included his parents and one sibling, older sister Nancy. "Dean liked to do things with friends, but he could also amuse himself for hours — doing things like making plastic models of planes and boats," said his sister, who now is a part-time professor and full-time senior research associate in psychology at Pittsburgh's Carnegie Mellon University. "He certainly had a mind of his own when it came to choosing whether or not to join the crowd."

As a senior at St. Louis Country Day School, Kropp showed his independence while deciding whether to attend Stanford or Princeton. "Because 10 guys in my class had decided on Princeton, I chose Stanford," he said. "I wanted to take a different path."

"because if, for instance, a component in a ship installation didn't work, the ship couldn't go on patrol. Ship captains would call me at 2 in the morning yelling, 'Your blankety-blank piece of equipment doesn't work.' And I didn't have the luxury of saying, 'Take two aspirin and call me in the morning.' In that setting, you survived or you didn't. I was lucky enough to thrive." Kropp was commissioned in the Navy, and when he left it at age 28, he already had a wealth of experience.

His Navy experience whetted his fascination with manufacturing, so he went back to Stanford to earn a doctoral degree in industrial engineering. While working on the doctorate, he became a teaching assistant and then an acting instructor.

During graduate school, he also discovered wine tasting — a love of his ever since — and he's now a connoisseur. "I have a passion for good and great wines,

especially ones from France and California," he said. In his home, a sixth-floor condominium in St. Louis, he converted a closet into a wine cellar.

His interest in wine tasting benefits the business school. For an annual fund-raising auction for Women in Management (WIM), whose members are female MBA students, he donates cases of wine and four wine-tasting parties hosted by his family. Last year, the auction raised \$7,000, which was used for a scholarship and programs offered by WIM.

"He never does anything halfway," said Mary Price, a second-year MBA student and former WIM president. "He always gives 100 percent. I'm taking his 'Quality Management' course now, and he's always available to help students — whether they need help in course work, networking or securing a position."

Coming home

Kropp, who previously taught at Northwestern University in Evanston, Ill., and at Dartmouth College in Hanover, N.H., said he never thought he'd end up back in St. Louis. "But Bob Virgil (former dean) gets credit for being very persuasive," Kropp said. "Even though, in 1986, I was fat, dumb,

happy and tenured at Tuck (Dartmouth's business school), he persuaded me to trial sample Olin by being a visiting professor for a year." Kropp, who sensed the opportunity and vision of developing the business school, was won over.

Kropp said the rate of change has increased dramatically since the 1995 arrival of Dean Stuart I. Greenbaum, Ph.D. "We're better for it, but major changes rarely go perfectly, and we're facing challenges — such as integrating many new faculty. I'm excited by Olin's overall higher performance. I got the title of associate dean when Stuart arrived, so he helped complicate my life," Kropp said with a laugh.

Greenbaum describes Kropp as one of the business school's most versatile and gifted teachers. "Dean is what I call a 'franchise player,' someone who embodies the best of Olin," Greenbaum said. "He maintains an active research agenda as he contributes unselfishly as a leader of innovation. He and other franchise players will lift the school to the highest level of excellence."

What is the biggest challenge facing Kropp now? "Managing my life," he said. "Besides my professional life, I have a wife and three children. And Kristine and the kids really help me keep my balance."

Their daughters are Chandler, 10 months, and Caitlin, 3. Kropp shares custody of his son, Hobart, 12, with his former wife. Kropp said it's a challenge after work to swing by three places to pick up "Channie," "Caitie" and "Hobie" and get them home by 6 p.m.

"What we love to do is go on outings to the zoo, Laumeier Sculpture Park or the science center — or even just to go shopping," Kropp said. "We have good times together."

So what is it that drives Kropp? "Making sure I have fun," he quipped. "The fun is in the broad mix — not just one ingredient."

— Nancy Belt



Dean H. Kropp, Ph.D., shows graduate student Mary Price a bottle of wine that was among several cases he donated to a fund-raising auction to benefit Women in Management at the John M. Olin School of Business.

"I don't ever do one thing to the exclusion of all others. I believe research, consulting and teaching enrich each other."

As an undergraduate at Stanford, he was inducted into the Phi Beta Kappa honor society, and he won the F. E. Terman Engineering Award. He received a bachelor's degree in engineering (with great distinction) from Stanford in 1968, during the Vietnam era.

Although he was subject to the military draft, Kropp was able to complete a master's degree in industrial engineering at Stanford before being accepted in 1969 into the U.S. Navy Officers Candidate School in Newport, R.I.

Most students became officers on nuclear ships or joined the staff of legendary Admiral H. G. Rickover. Kropp did the latter, becoming an engineer and later an engineering manager in the U.S. Atomic Energy Commission's Division of Naval Reactors in Washington, D.C. "Being on the admiral's staff was a fantastic experience," Kropp said. "He had exceptionally high standards, and I learned a great deal from him."

Kropp was responsible for major components of nuclear reactor power plants used in submarines and surface ships. "We had no small dose of crises," he said,

Calendar

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

March 27–April 5



Exhibitions

"Abstract Expressionism: American Art in the 1950s and '60s." A collection of 20th-century masterpieces by artists of the "New York School." Through April 6. Gallery of Art, upper gallery, Steinberg Hall. Hours: 10 a.m. to 4:30 p.m. weekdays; 1 to 5 p.m. weekends. 935-4523.

Arts Connection/City Faces exhibit. Features works by participants in City Faces, a summer drawing program for at-risk youths. Through March 29. Center Of Contemporary Arts, 524 Trinity Ave. Hours: 1 to 8 p.m. Tuesdays through Thursdays; noon to 5 p.m. Fridays and Saturdays. 725-6555.

"Curtain Time: Student Performing Arts at Washington University." Exhibit opens March 31 and runs through May 30. Special Collections, level five, Olin Library. Hours: 8:30 a.m. to 5 p.m. weekdays. 935-5495.

"The Lens of Architecture: Ronchamp Through Hervé." Architectural photographs by 20th-century photographer Lucien Hervé. Through March 30. Gallery of Art, lower gallery, Steinberg Hall. Hours: 10 a.m. to 4:30 p.m. weekdays; 1 to 5 p.m. weekends. 935-4523.

Selections from the Washington University art collections. "European Artists After World War II," Gallery of Art, lower gallery, Steinberg Hall; "Early European and American Modernism," lower gallery; "Selected Sculpture From the Washington University Art Collections," upper gallery. Through April 6. Hours: 10 a.m. to 4:30 p.m. weekdays; 1 to 5 p.m. weekends. 935-4523.

"The Third World Through European Eyes: Postcolonial German Literature." Through March 31. Special Collections, level five, Olin Library. Hours: 8:30 a.m. to 5 p.m. weekdays. 935-5495.



Films

All Filmboard movies cost \$3 and are shown in Room 100 Brown Hall. For the 24-hour Filmboard hotline, call 935-5983.

Friday, March 28

7 and 9:30 p.m. Filmboard Feature Series. "Emma." (Also March 29, same times, and March 30 at 7 p.m.)

Midnight. Filmboard Midnight Series. "The Secret of NIMH." (Also March 29, same time, and March 30 at 9:30 p.m.)

Tuesday, April 1

6 p.m. Japanese Film Series. "The Family Game." Room 219 South Ridgley Hall. 935-5156.

7 and 9 p.m. Filmboard Classic Series. "The Wrong Man." (Also April 2, same times.)

Friday, April 4

7 and 9:30 p.m. Filmboard Feature Series. "Lone Star." (Also April 5, same times, and April 6 at 7 p.m.)

Midnight. Filmboard Midnight Series. "Reservoir Dogs." (Also April 5, same time, and April 6 at 9:30 p.m.)



Lectures

Thursday, March 27

Noon. Genetics seminar. Topic to be

announced. Speaker is Francis Collins, National Human Genome Research Institute, National Institutes of Health, Bethesda, Md. Cori Aud., 4565 McKinley Ave. 362-3365.

Noon. Neuroscience seminar. "The Neural Basis of Temporal Processing: Psychophysical, Cellular and Computational Studies," Dean Buonomano, U. of California. Room 928 McDonnell Medical Sciences Bldg. 362-3365.

1:10 p.m. Social work lecture. "Social Security Changes in Mexico," Clemente Ruiz Duran, chair, Political Economy Program, U. of Mexico, Mexico City. Brown Hall Lounge. 935-4909.

2:45 p.m. Electrical engineering seminar. "Is There Life After Gauss?" Ulf Grenander, CIS chief scientific adviser, Division of Applied Mathematics, Brown U., Providence, R.I. Room 305 Bryan Hall. 935-6195.

3 p.m. Chemistry seminar. Leopold Marcus Lecture. "Bleomycin Structure and Function," Joanne Stubbe, prof. of chemistry and of biology, Massachusetts Institute of Technology. Room 458 Louderman Hall. 935-6530.

4 p.m. Assembly Series. "Postcolonialism and Literature," Edward W. Said, University Professor and chair, Doctoral Program in Comparative Literature, Columbia U. Graham Chapel. 935-5285. (Opens the international symposium "The Third World Through European Eyes: Postcolonial German Literature 1970-1990," through March 30, Women's Bldg. Lounge. 935-4360.)

4 p.m. Cancer Center seminar. "Genetics of Human Malignant Melanoma: Determination of Gene Expression Patterns by cDNA Microarrays," Jeffrey M. Trent, chief, Laboratory of Cancer Genetics, and scientific director, National Human Genome Research Institute, National Institutes of Health, Bethesda, Md. Third Floor Aud., St. Louis Children's Hospital. 362-9035.

4 p.m. Central Institute for the Deaf seminar. "Myosin Ca++ Binding and Cytoskeletal Proteins in Hair Cell Function and Regeneration," Peter Steyger, Legacy Good Samaritan Hospital and Medical Center, Portland, Ore. Room 928 McDonnell Medical Sciences Bldg. 362-3365.

4 p.m. Earth and planetary sciences colloquium. "What Controls Trace-element Partition Coefficients? Evidence From Experiments on Peraluminous Granitic Systems," Jonathan Icenhower, Calvin College, Grand Rapids, Mich. Room 362 McDonnell Hall. 935-5603.

4:30 p.m. Math talk. Loeb Colloquium. "The Mathematics and Physics of the Second Law of Thermodynamics," Elliott Lieb, prof. of mathematics, Princeton U. Room 199 Cupples I Hall. 935-6726.

5 p.m. Vision sciences seminar. "Functional Analysis of the Retinoblastoma Pathway In Vivo: A Crystal-clear View of Cell Cycle Control," Ron DePinho, Dept. of Microbiology and Immunology, Albert Einstein U., Bronx, N.Y. East Pavilion Aud., Barnes-Jewish Hospital. 362-3365.

5:30 p.m. Art history and archaeology lecture. "Problems of Realism 1939-1956: Philip Evergood and the Communist Party," Andrew Hemingway, lecturer, U. College, London. Room 200 Steinberg Hall. 935-5270.

6 p.m. Social work lecture. "Family Issues of the '90s: Team-based Family Treatment," Beth Gooch, social worker, Edgewood Children's Center, Webster Groves, Mo. Brown Hall Lounge. 935-4909.

8 p.m. European studies/Germanic languages and literatures lecture. "Writing About the Third World," Uwe Timm, author and Max Kade Writer-in-Residence, Dept. of Germanic Languages and Literatures, Goethe Institute, 326 N. Euclid Ave. 367-2452.

Friday, March 28

9:15 a.m. Pediatric Grand Rounds. "The Social Life of Baboons: The Intersection of Behavior and Biology," Jane Phillips-Conroy, assoc. prof. of anatomy and neurobiology and of anthropology. Clopton Aud., 4950 Children's Place. 454-6006.

4 p.m. Hematology seminar. "GATA-binding Proteins and Cardiovascular Development," David B. Wilson, asst. prof. of molecular biology and pharmacology and of pediatrics. Room 8841 Clinical Sciences Research Bldg. 362-3365.

4 p.m. Neuroscience seminar. "Thalamocortical Response Transformations in Real and

Simulated Whisker Barrels," Daniel J. Simons, Dept. of Neurobiology, U. of Pittsburgh School of Medicine. Cori Aud., 4565 McKinley Ave. 362-3365.

Monday, March 31

Noon. Molecular biology and pharmacology seminar. Topic to be announced. Speaker is George W. Gokel, prof. of molecular biology and pharmacology. Needleman Library, Room 3907 South Bldg. 362-7078.

3:30 p.m. American Association of University Professors (WU chapter) annual meeting. "The Faculty Role in Shaping the Future of Universities," Chancellor Mark S. Wrighton. Room 112 Wilson Hall. 935-5670.

4 p.m. Biology seminar. "Subtle is Nature: The Genetics of Speciation and Species Differentiation," Chung-I Wu, Dept. of Ecology and Evolution, U. of Chicago. Room 322 Rebstock Hall. 935-6860.

4 p.m. Immunology research seminar. "Control of T Cell Migration by Antigen: The Stop Signal Hypothesis," Michael L. Dustin, asst. prof. of pathology. Eric P. Newman Education Center. 362-2798.

4 p.m. Jewish and Near Eastern studies/religious studies lecture. "The Lubavitcher Rebbe as Messiah: Implications for Judaism and the Messianic Idea," David Berger, prof. of history, Brooklyn College and Graduate School of the City University of New York. Lambert Lounge, Room 303 Mallinckrodt Center. 935-8567.

Tuesday, April 1

Noon. Molecular microbiology/microbial pathogenesis seminar. "Symbiosis Between Innate and T Cell Immunity," Emil R. Unanue, the Edward Mallinckrodt Professor and head, Dept. of Pathology. Cori Aud., 4565 McKinley Ave. 362-7258.

4 p.m. History/Jewish and Near Eastern studies lecture. "The Ritual Murder Trials of the Turn of the Century as a Site for Modern Jewish History," Hillel J. Kieval, the Strum Professor of Jewish Studies and prof. of history, U. of Washington, Seattle. Hurst Lounge, Room 201 Duncker Hall. 935-8567.

4 p.m. Math talk. Wavelets and P.D.E.s seminar. "Square Roots of Elliptic Operators on Lipschitz Domains," Paschal Auscher, prof. of mathematics, Université de Picardie-Jules Verne (Amiens). Room 199 Cupples I Hall. 935-6726.

6:15 p.m. Germanic languages and literatures lecture. "Argumente gegen die 'Tragödie': Zur Theorie und Praxis des deutschen Nachkriegsdramas," Ulrich Profitlich, prof. of German, Freie Universität Berlin. Stix International House. 935-5106.

Wednesday, April 2

6:30 a.m. Anesthesiology Grand Rounds. "Update on Management of Pancreatic Cancer," Jeffrey A. Drebin, asst. prof. of surgery. Wohl Hospital Bldg. Aud., 4960 Children's Place. 362-6978.

8 a.m. Obstetrics and Gynecology Grand Rounds. "VBAC Reconsidered ... Again," William L. Holcomb Jr., asst. prof. of obstetrics and gynecology. Clopton Aud., 4950 Children's Place. 362-3143.

11 a.m. Assembly Series. Martin Luther King Jr. Symposium keynote address. Kweisi Mfume, president and CEO, NAACP, and author of "No Free Ride." Graham Chapel. (See story on page 5.) 935-5285.

Noon. Biochemistry and molecular biophysics seminar. "Structure of a G Protein and Role in Signal Transduction," Heidi E. Hamm, prof. of molecular pharmacology and biological chemistry, Northwestern U. Institute for Neuroscience, Chicago. Cori Aud., 4565 McKinley Ave. 362-0261.

3:45 p.m. Physics colloquium. "Trapped Ions, Schrödinger's Cat, and Quantum Logic," D. J. Wineland, National Institute of Standards and Technology, Boulder, Colo. Room 204 Crow Hall. 935-6252.

4 p.m. Biochemistry and molecular biophysics seminar. "Actin-Membrane Interactions in Motile Cells," Elizabeth J. Luna, principal scientist, cell biology group, The Worcester Foundation for Biomedical Research, Shrewsbury, Mass. Cori Aud., 4565 McKinley Ave. 362-0261.

7 p.m. Women's International League for Peace and Freedom/environmental studies lecture. "Five Years After the Rio Earth Summit — Is the World Bank Still Mortgaging the Earth?" Bruce Rich, senior attorney,

Environmental Defense Fund, and author of "Mortgaging the Earth." Steinberg Hall Aud. 935-7047.

Thursday, April 3

11:15 a.m. Mental health seminar. "Overview of Results From the Missouri Child Outcome Study," LaVonne Daniels, asst. research prof., Missouri Institute of Mental Health, U. of Missouri, Columbia. Room 353 West Campus Administrative Center. 935-5687.

4 p.m. Assembly Series. John and Penelope Biggs Resident in the Classics lecture. "The Greek Temple and Ancient Sicily," R. Ross Holloway, director, Center for Old World Archaeology and Art, Brown U., Providence, R.I. Steinberg Hall Aud. (See story on page 5.) 935-5285.

4 p.m. Chemistry lecture. The 38th Joseph W. Kennedy Memorial Lecture. "Mimicking the Sense of Olfaction: An Electronic Nose," Nathan S. Lewis, prof., California Institute of Technology, Pasadena. Room 458 Louderman Hall. 935-6530.

4 p.m. Joint Center for East Asian Studies colloquium. "Accumulating Dilemmas: China's Incomplete Transition to an Open Economy," Barry Naughton, assoc. prof., Graduate School of International Relations and Pacific Studies, U. of California at San Diego. Room 30 January Hall. 935-4448.

4 p.m. Pathology lecture. Paul E. Lacy Lecture. "Apoptosis and Carcinogenesis: Relationships and Uncertainties," Andrew H. Wyllie, co-director, Cancer Research Campaign Laboratories, and prof. and head, Dept. of Pathology, U. of Edinburgh, Scotland. Eric P. Newman Education Center. 362-7725.

4:15 p.m. Philosophy lecture. "Does the Ideal of Universally Valid Science Decrease Global Democracy?" Sandra Harding, prof. of philosophy, U. of California at Los Angeles. Alumni House living room. 935-6614.

Friday, April 4

11 a.m. Chemistry lecture. The 38th Joseph W. Kennedy Memorial Lecture. "Light-induced Charge Separation at Semiconductor/Liquid Interfaces," Nathan S. Lewis, prof., California Institute of Technology, Pasadena. Room 311 McMillen Lab. 935-6530.

Noon. Cell biology and physiology seminar. "Regulation of Mammalian Lysosome Fusion," Jerry Kaplan, Dept. of Pathology, U. of Utah School of Medicine, Salt Lake City. Room 426 McDonnell Medical Sciences Bldg. 362-6950.

2:30 p.m. Environmental engineering/mechanical engineering seminar. "Systems Approach to Air-quality Analysis and Management," Rudolf B. Husar, prof. of mechanical engineering and director, Center for Air Pollution Impact and Trend Analysis. Room 100 Cupples II Hall. 935-6055.

2:30 p.m. Philosophy/women's studies lecture. "Can Men Think Feminist Theory?" Sandra Harding, prof. of philosophy, U. of Delaware, and adjunct prof. of philosophy and of women's studies, U. of California at Los Angeles. Room 100 Busch Hall. 935-5102.

4 p.m. Biology seminar. Biology as an Interdisciplinary Science: Frontiers for the 21st Century. "Genetic Constraints and the Evolution of Insect-Plant Associations," Douglas Futuyma, Dept. of Ecology and Evolution, State U. of N.Y. at Stony Brook. Room 162 McDonnell Hall. 935-6860.

6 and 8:30 p.m. WU Association Travel Lecture Series. "Alcan: Adventure Road to Alaska," Sandy Mortimer, travel consultant. Graham Chapel. Cost: \$4.50. 935-5212.



Music

Thursday, March 27

3 p.m. Music class. Master class on jazz improvisation with St. Louis-born trumpeter Clark Terry. Room 102 new music classroom bldg. 935-5581.

8 p.m. Student recital. Program and featured performers to be announced. Graham Chapel. 935-5581.



Performances

Thursday, March 27

8 p.m. Jewish Theater Group presents "RUMORS," a farce by Neil Simon. (Also March 29, same time, and March 30 at 2 and 8 p.m.) Edison Theatre. Cost: \$7 for the general public; \$4 for students. 726-6177.

Friday, April 4

8 p.m. The Performing Arts Department presents "Cabaret." Directed by Melanie A. Dreyer, artist-in-residence in drama. (Also April 5, 11 and 12, same time, and April 6 and 13 at 2 p.m.) Edison Theatre. Cost: \$8 for the general public; \$6 for senior citizens and WU students, faculty and staff. (See story on page 6.) 935-6543.

Saturday, April 5

8 p.m. Edison Theatre's "OVATIONS!" series presents Sweet Honey In The Rock, a female a cappella group known for lush harmonies and varied musical styles. Cost for the 8 p.m. show: \$20-\$35. (Also April 6 at 2 p.m. in a special "ovations! for young people" presentation. Cost: \$4-\$15.) Powell Symphony Hall, 718 N. Grand Blvd. (See story on page 6.) 935-6543.



Miscellany

Catholic Student Center Holy Week services: March 27, 7 p.m., Holy Thursday Mass, Catholic Student Center (CSC), 6352 Forsyth Blvd.; March 28, 7 p.m., Good Friday Service, CSC; March 29, 7 p.m., Easter Vigil Mass, CSC; and March 30, 11 a.m., Easter Sunday Mass, Graham Chapel. 725-3358.

Registration continues for the following Office of Continuing Medical Education seminars: "Fifth Annual Refresher Course and Update in General Surgery" (April 10-12) and "Common Cancers — Prevention, Detection and Therapy" (April 25). Call 362-6891 for times, costs and locations and to register.

Monday, March 31

2:15-3:45 p.m. University College short course. "Opera From Its Origins to the 20th Century — The 1997 Season of Opera Theatre of Saint Louis." Instructed by Hugh Macdonald, prof. and chair, Dept. of Music, and Sue Taylor, lecturer in music. (Continues Mondays through April 21.) Cost: \$80; \$70 for Friends of Music members. Call 935-6788 to register.

7-10 p.m. Twenty-third annual Internal Medicine Review (continued). The topic is cardiology. Steinberg Amphitheater, 216 S. Kingshighway Blvd. 362-6891.

Gass wins Book Critics Circle Award — from page 1

invited to a sleep-over in the Lincoln room. And I shall wear a smile as wide as my disappointment when I don't win. "As for this time: Thank you very, very much."

Published by Knopf, "Finding a Form" is a collection of essays by the novelist, critic and philosopher. A review of the book in Publishers Weekly said: "Gass' commitment to ideas, concentrated energy and originality shine through on every page. ... Gass' deeply felt essays ... are quotable, flecked with fertile insights and a pleasure to read."

Gass joined Washington University in 1969 as a professor of philosophy in Arts and Sciences. He was named the David May Distinguished University Professor in the Humanities in 1979. He helped found the International Writers Center — and became its first and present director — in 1990.

Tuesday, April 1

8 p.m. Fiction reading. Margot Livesey, author of "Criminals" and "Homework," will read from recent fiction. Hurst Lounge, Room 201 Duncker Hall. 935-5190.

Friday, April 4

7:25 a.m. Office of Continuing Medical Education seminar. "Clinical Pulmonary Update." (Continues April 5.) Eric P. Newman Education Center. Call 362-6891 for costs and to register.

7:30 a.m. Office of Continuing Medical Education seminar. The Leonard Berg Symposium on Alzheimer's Disease. Eric P. Newman Education Center. (See story on page 2.) Call 362-6891 to register.

Saturday, April 5

10 a.m.-6 p.m. Acting workshop. "Acting for the Camera." Two-day workshop presented by Tony Barr, WU alumnus and former vice president of CBS-Entertainment. (Continues April 6 from 11 a.m.-7 p.m.) Space is limited; registration deadline is April 1. Cost: \$235. Room 325 Mallinckrodt Center. Call 647-3758 to register.

10 a.m.-1 p.m. Book arts workshop. "Coptic Binding." A historical technique of bookbinding without using glue. Take home a book you will bind in class and supplies to make another at home. Supplies provided. Instructed by Anna Cox. Cost: \$35. Room 104 Bixby Hall. To register, call 935-4643.

8-11 p.m. Easter dance. Sponsored by the Catholic Student Center. Cost: \$3. Umrath Hall Lounge. 725-3358.



Vienna Fest 1997

"Dream City: Viennese Medicine as a Benchmark for St. Louis Physicians." Exhibit of photographs, rare books and documents on the scientific developments of late 19th-century Vienna. Drawn from the medical school's collections and archives. Through Aug. 29. Glaser Gallery, seventh floor, The Bernard Becker Medical Library. 362-7080.

"Visionaries in Exile — A Cultural Journey From 'Austria to America.'" A computer-interactive traveling exhibit on Viennese architects in the United States. Co-sponsored by the Austrian Cultural Institute New York and Architektur Zentrum Wien. Through March 30. Gallery of Art, upper gallery, Steinberg Hall. Hours: 10 a.m. to 4:30 p.m. weekdays; 1 to 5 p.m. weekends. 935-4523.

Friday, March 28

4 p.m. Music lecture. "The Piano in Gustav Mahler's 'Um Mitternacht' — Invention or Error?" Sue Taylor, lecturer in music. Room 102 new music classroom bldg. 935-4841.

Public forum on 'Peirce Report'

A public comment forum on "The Peirce Report on Greater St. Louis" — featuring urban affairs experts and report authors Neal Peirce and Curtis Johnson — will be held at 7 p.m. Wednesday, April 2, in the Eric P. Newman Education Center. The event is free and open to the public; however, tickets are required. For more information, call (314) 206-3200.

NAACP leader Kweisi Mfume to deliver symposium's keynote

Kweisi Mfume, president and chief executive officer of the NAACP, will deliver the Martin Luther King Jr. Symposium's keynote address at 11 a.m. Wednesday, April 2, in Graham Chapel. This Assembly Series lecture is free and open to the public, with limited seating.

Before taking the leadership position at the National Association for the Advancement of Colored People (NAACP), Mfume served as a U.S. representative from Maryland for five terms. In that capacity, he brought congressional attention to minority business-development concerns and advocated significant civil-rights legisla-



Kweisi Mfume

tion. He also served as chair of the Congressional Black Caucus and later as the caucus' chair of the Task Force to Preserve Affirmative Action. As a U.S. representative, he co-sponsored the Americans with Disabilities Act. In addition, he co-authored and amended the Civil Rights Act of 1991 to apply the act to U.S. citizens working for companies abroad.

Mfume's recently published autobiography, "No Free Ride: From the Mean Streets to the Main Stream," chronicles his rise from a life on the streets to a life as a political leader.

Mfume graduated magna cum laude from Baltimore's Morgan State University in 1976 and later returned as an adjunct professor, teaching courses in political science and communications. He earned a master's degree in liberal arts, with a concentration in international

studies, from Baltimore's Johns Hopkins University.

The annual Martin Luther King Jr. Symposium is organized by the Association of Black Students (ABS). This year's symposium theme is "Education in the Black Community: Looking Beyond Our Boundaries."

The symposium kicks off at 7 p.m. Monday, March 31, with an interactive program titled "Education or Mis-education: What Are We Really Learning at WU and Beyond?" This program will be held in the McMillan Hall cafeteria and will highlight current issues pertaining to how black people educate themselves and use education in the black community.

At 7 p.m. Tuesday, April 1, a workshop on "Black College Students' Political Responsibility to the Black Community" will be held in Friedman Lounge in Wohl Student Center.

The ABS will hold its version of the game show "The \$25,000 Pyramid" at 7 p.m. Thursday, April 3, in the northeast corner of Wohl Student Center. The theme of the game show is "Building Our Knowledge of the Past in Hopes of a Brighter Future." The event will test participants' knowledge of black history and culture.

"A Tribute to Black Men and Women" will be held in Lambert Lounge, Room 303 Mallinckrodt Center, at 7 p.m. April 4. In this event, the ABS will recognize undergraduates who have contributed to and had an impact on the community.

The ABS' annual spring formal — "An Evening of Elegance" — will be held April 5.

For more information about Mfume's lecture, call (314) 935-5285. For more information about the symposium, call (314) 935-5994.

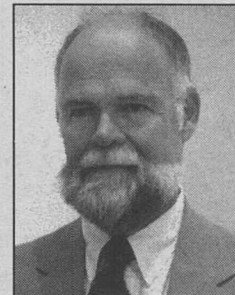
Assembly Series features archaeologist Holloway

Archaeologist R. Ross Holloway, Ph.D., Washington University's John and Penelope Biggs Resident in the Classics in Arts and Sciences, will deliver a lecture titled "The Greek Temple and Ancient Sicily" at 4 p.m. Thursday, April 3, in Steinberg Hall Auditorium. This Assembly Series lecture is free and open to the public.

Holloway is the director of the Center for Old World Archaeology and Art and is the Elisha Benjamin Andrews Professor of Art at Brown University in Providence, R.I. He is the author of "The Archaeology of Ancient Sicily" and "The Archaeology of Early Rome and Latium."

He was the co-founder and, from 1976-78, was president of the Association for Field Archaeology. From 1980-86, he

was the president of the International Center for Numismatic Studies in Naples, Italy. In 1995, he received the Archaeological Institute of America's Gold Medal for Archaeological Achievement.



R. Ross Holloway

Holloway earned a bachelor's degree, summa cum laude, in 1956 from Amherst College in Massachusetts. He earned a master's degree in 1957 from the University of Pennsylvania. He earned both a master's degree and a doctorate in 1960 from Princeton University.

For information, call (314) 935-5285.

Sports

Compiled by Mike Wolf, director, and Kevin Bergquist, asst. director, sports information. For the most up-to-date news about Washington University's athletics program, access the Bears' Web site at www.sports-u.com.

Men's tennis snaps skid

With a 5-2 victory over Central College (Pella, Iowa), the Washington University men's tennis team halted its five-match losing skid.

Current record: 3-5

This week: 3 p.m. Thursday, March 27, vs. University of Missouri-St. Louis, Tao Tennis Center

Baseball falls below .500

The baseball team stopped a six-game losing streak with a 2-0 defeat of Simpson College (Indianola, Iowa) on Saturday, March 22. That was the only win the Bears could muster in six week-end outings, however.

Current record: 7-10

This week: 11 a.m. Friday, March 28, vs. Illinois Wesleyan University (Bloomington) and 1:30 p.m. March 28 vs. Illinois College (Jacksonville), Kelly Field; 11 a.m. Saturday, March 29, vs.

Milwaukee School of Engineering and 1:30 p.m. March 29 vs. Illinois College, Kelly Field

Women's tennis on skid

The women's tennis team dropped its sixth consecutive match, falling Sunday, March 23, at home to Division I Indiana State University (Terre Haute).

Current record: 1-6

This week: 10:30 a.m. and 5 p.m. EST Friday, March 28, vs. Saint Mary's College (South Bend, Ind.) and Albion (Mich.) College at Hope College (Holland, Mich.); 9:30 a.m. EST Saturday, March 29, at Hope College

Outdoor track begins

Five track and field athletes posted first-place showings last weekend at the Augustana College Early Spring Opener. The Bears host the Washington U. Twilight Meet at 3 p.m. Friday, March 28, at Bushyhead Track and Francis Field.



Senior Rebecca Novak portrays Fräulein Schneider; graduate student Robert Neblett portrays Herr Schultz; and senior Doug Divine portrays a Nazi soldier in the upcoming performances of "Cabaret."

'Cabaret': a dark story wrapped in a fun package

The decadence of Berlin on the eve of the Third Reich will come to life in all its excesses when Washington University stages the groundbreaking musical "Cabaret" next month in Edison Theatre.

The Performing Arts Department in Arts and Sciences will present this biting tale of love, hate and international culpability in the face of Nazism at 8 p.m. April 4 and 5 and at 2 p.m. April 6. Performances continue at 8 p.m. April 11 and 12 and at 2 p.m. April 13.

Written by Joe Masteroff with music by John Kander and Fred Ebb, the musical tells the story of cabaret singer Sally Bowles and struggling novelist Cliff Bradshaw. The two fall in love in the swinging Bohemian atmosphere of Berlin during the 1920s. But their bright romance eventually is overshadowed by the dark rise of Adolph Hitler and the increasing dangers in Germany. The two lovers watch as their lives and the world they once knew crumble around them.

Melanie A. Dreyer, artist-in-residence in performing arts, is directing the 23-member cast in the musical that she describes as both highly entertaining and deeply serious.

"What strikes me most about the play is the implication of the international culpability during the rise of the Third Reich," Dreyer said. "I think the inherent message is that hate can exist anywhere, and if one just looks away and does nothing — whether they are from outside the cultural environment or from within — we risk the danger of hate rising to power again."

While tackling a serious subject, the play is set in a cabaret filled with frivolity and gaiety. "The juxtaposition of moods creates a strong dynamic," Dreyer said. "It's a dark political story wrapped up in a fun package. It's vaudevillian and highly theatrical. The play contains a kind of 'wink' at the audience. Every time a serious, realistic moment occurs, the master of ceremonies comments on it in some wry, dark,

A MUSICAL EVENING

What: The Performing Arts Department in Arts and Sciences presents the musical "Cabaret."

When: 8 p.m. April 4 and 5; 2 p.m. April 6; 8 p.m. April 11 and 12; and 2 p.m. April 13

Where: Edison Theatre

Tickets: \$8 for the general public and \$6 for senior citizens and Washington University faculty, staff and students. Tickets are available at the Edison Theatre box office, (314) 935-6543, and at all MetroTix outlets, (314) 534-1111.

funny way — so you're not really allowed to be taken along on an emotional ride."

First staged in 1966, the story of "Cabaret" had several previous incarnations. In 1933, British author Christopher Isherwood wrote a book titled "Berlin Stories," recounting his experiences in that city during the rise of the Nazis. In the 1940s, playwright John van Druten wrote a play based on Isherwood's book. The play is titled "I Am A Camera," which refers to the fact that the main character watches as the Nazis rise to power and does nothing to stop it, Dreyer said.

"Cabaret" — the musical form of the story — was the mastermind of Hal Prince, a renowned Broadway director. He envisioned the work in the 1960s as a response to the riots that erupted during the civil-rights movement in the United States, Dreyer said. Prince hired Masteroff to create a libretto based on both Isherwood's book and van Druten's play. Prince hired Kander and Ebb to write the music and lyrics. The musical team wrote 47 songs, of which 15 are used in current productions.

When "Cabaret" first hit the stage, it was not well-received, Dreyer noted. It broke many of the conventions for musicals of the time, she said, particularly in its dark story line.

"People in 1966 were going to

'Camelot' and 'My Fair Lady,' plays with warm love stories that swept you from beginning to end," Dreyer said. "Not only was 'Cabaret' not a warm and fuzzy story, but it had a love story that goes wrong — a love that is destroyed at the end of the play. That's not how musicals were supposed to end."

Stylistically, the musical also forged new ground. Much of the music is designed to comment on the action, not just create an emotional moment within the context of a dramatic situation, Dreyer explained. "This forces the audience in and out of certain emotional perspectives," she said. "That's not something they were accustomed to."

The musical takes on an important and complex subject, the type of work the Performing Arts Department is known for producing each season, Dreyer said. It is, however, the first time in recent years that the department has produced a musical. The form suits Dreyer's particular talents. A director and a founder of the former ShatterMask Theatre, Dreyer is known for directing contemporary, non-realistic works. She also has enjoyed a successful career in musical theater as an actress. "This combines both of my experiences," she said.

— Neal Learner

April Welcome expected to draw 1,000 visitors

Just as the first crocuses are sprouting in Brookings Quadrangle, April Welcome is springing into action. The annual monthlong event will bring about 1,000 prospective students of the Class of 2001 to campus to sample life at Washington University.

Each student admitted to next fall's freshman class received in his or her admission packet an invitation to visit the campus anytime in April. Those students offered admission were culled from an all-time record of nearly 14,000 undergraduate applications, an increase of 23 percent over last year.

April Welcome is a critical factor in determining where students enroll in the fall, said Nanette Clift, director of recruitment in the Office of Undergraduate Admissions. About half of the students who participate in April Welcome end up enrolling at Washington University, she said.

"When you visit campus, you can get a feeling not just for the school but for what our community is like," Clift said. "Time after time, we hear what a friendly and warm place Washington University is. April Welcome is a really powerful thing."

While in St. Louis, the high school seniors can take part in activities both on and off campus. They can stay with current University students in a residence hall; sit in on a variety of classes; talk with faculty members; attend meetings and social activities sponsored by numerous student organizations; and visit the area's attractions, from The Saint Louis Art Museum to the Gateway Arch. The second weekend of the month will be a Multicultural Celebration, a special event devoted to multicultural students and co-sponsored by the admissions office and a number of student organizations.

For the entire month, the undergraduate admissions office, Room 105 Eads Hall, will extend its hours for prospective students and their parents. In addition to its regular 8:30 a.m. to 5 p.m. weekday hours, the office will be open from 9 a.m. to 2 p.m. Saturdays and Sundays. Student Financial Services, Room 12 Eads Hall, will hold drop-in hours from 1 to 4 p.m. Mondays and Fridays and from 1 to 3 p.m. Tuesdays, Wednesdays and Thursdays.

Additional campus tours will be added to the schedule for April Welcome. Tours will leave from the undergraduate admissions office at 10 and 11 a.m. and at 2:30 p.m. Mondays and Fridays; at 11 a.m. and 2:30 p.m. Tuesdays, Wednesdays and Thursdays; at 10:30 a.m. and noon Saturdays; and at noon Sundays.

Campus Watch

The following incidents were reported to the University Police Department from March 17-23. Readers with information that could assist the investigation of these incidents are urged to call (314) 935-5555. This release is provided as a public service to promote safety-awareness on campus.

March 17

11:36 a.m. — A VCR was reported stolen from the Women's Building.

March 18

3:16 p.m. — A computer was reported stolen from a Bryan Hall computer lab.

March 19

5:41 p.m. — A portable radio, keys and a wallet containing credit cards were reported stolen from Liggett Residence Hall.

March 20

7:52 p.m. — A backpack containing \$30, books and credit cards was reported stolen from a bench on the intramural field.

March 21

11:30 p.m. — A student reported that a man exposed himself in the north lobby entrance of Wohl Student

Center. The man is described as white; in his late 40s to early 50s; with medium-length, thinning gray hair; and wearing a turquoise T-shirt and possibly glasses.

March 22

2:43 a.m. — A TKO Disc Jockeys employee reported that 29 compact discs were stolen from an unattended box on the west side of Mallinckrodt Center.

4:55 a.m. — A student reported that someone entered her Washington Hall room while she was sleeping and assaulted her. She resisted, and the suspect fled. Clayton police later arrested a student, who has been charged with deviant sexual assault and burglary.

University Police also responded to five reports of vandalism; one report of theft; one attempted burglary; and two reports of altercations.

Female a cappella group to sing in Powell

Renowned female a cappella group Sweet Honey In The Rock will perform a special concert at 8 p.m. April 5 in Powell Symphony Hall, 718 N. Grand Blvd. The ensemble also will perform a matinee concert for children at 2 p.m. April 6 in Powell.

The performances are part of Edison Theatre's "OVATIONS!" series and are co-sponsored by the Saint Louis Symphony Orchestra and the Center Of Contemporary Arts. The matinee is part of the "ovations! for young people" series.

Since 1973, Sweet Honey In The

Rock has created a living musical patchwork quilt. Voluminous solos and lush harmonies sew together protest songs, hymns, spirituals, gritty blues ballads, traditional West African songs, and jazzy scat improvisations.

Tickets to the evening performance range from \$20 to \$35. Tickets to the matinee range from \$4 to \$11 for children and \$8 to \$15 for adults. Tickets are available at the Edison Theatre box office, (314) 935-6543, and at all MetroTix outlets, (314) 534-1111.

Paul E. Lacy and Robert M. Walker each receive lifetime service award

The Academy of Science of St. Louis honored two Washington University scientists for their distinguished careers of service and their accomplishments at its annual awards dinner Thursday, March 20, at the Missouri Botanical Garden.

Receiving the academy's Peter H. Raven Lifetime Award were Paul E. Lacy, M.D., Ph.D., professor emeritus of pathology and former chair of the Department of Pathology at the School of Medicine, and Robert M. Walker, Ph.D., the McDonnell Professor of physics and director of the McDonnell Center for the Space Sciences in Arts and Sciences.

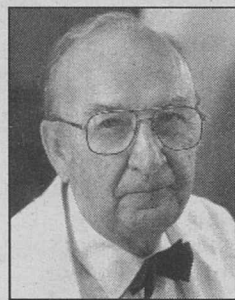
Raven, Ph.D., director of the Missouri Botanical Garden, is the Engelmann Professor of Botany in the Department of Biology in Arts and Sciences at Washington University. The academy established the award "to symbolize Raven's commitment to seeking the truth through scientific discovery and its use for the betterment of humankind."

William H. Danforth, chairman of the University's Board of Trustees, was the featured speaker at the awards dinner. University alumnus James M. Bornholdt received the academy's Innovation Award, which is given to a scientist younger than 40. Principal engineer at McDonnell Douglas Aerospace, Bornholdt received a master's degree in electrical engineering from the University.

Studying islet cells

In his 40-year career at the School of Medicine, Lacy made many breakthroughs in the study of insulin-dependent diabetes. His work centered on islets, the cells in the pancreas that produce insulin. In 1967, he discovered a method to isolate islet cells — a landmark accomplishment that let researchers study the physiology and biochemistry of the cells.

With the ultimate goal of curing human diabetes, Lacy pioneered the process of islet transplantation. His first



Paul E. Lacy

step was to develop a method of maintaining islets in organ cultures virtually indefinitely. This provided material for immunology studies and experimental transplants of the cells. He later

proved that islet transplantation could normalize blood sugar and reverse other complications in diabetic rats. In 1990, Lacy's research led to a successful transplantation of islet cells into a diabetic patient who had needed daily insulin injections for the previous 27 years. Since the operation, the patient has led an active life without insulin shots.

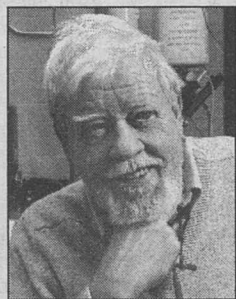
"Lacy has always been at the forefront of whatever research endeavor he undertook," said Philip E. Cryer, M.D., the Irene E. and Michael M. Karl Professor

of Endocrinology and Metabolism at the medical school.

The space sciences

Walker was the first director of the McDonnell Center for the Space Sciences, which was established at the University in 1975 through a gift from the late James S. McDonnell. Walker has built an interdisciplinary center for the space sciences and astrophysics that spans several departments and involves more than 80 faculty members, research scientists and students. He also helped revitalize the geology department, now the Department of Earth and Planetary Sciences in Arts and Sciences.

His work in the late 1950s on defects in irradiated copper still is regarded as the final word in that area. In the early 1960s,



Robert M. Walker

Walker's discovery of fossil nuclear particle tracks in minerals led to new developments in geochronology and cosmic ray physics. In particular, his discovery of tracks from nuclei heavier than iron opened a new frontier of

cosmic ray physics. He subsequently pioneered the use of plastics to measure such nuclei in cosmic ray balloon flights. Walker was a member of the NASA committee that allocated samples of the first returned lunar materials. His laboratory at Washington University played an important role in the samples' initial study, using the moon rocks to measure the past history of solar radiation and cosmic rays.

His recent achievements include the design of micrometeorite capture cells that were flown aboard NASA's Long Duration Exposure Facility; the verification of the extraterrestrial origin of stratospheric dust particles; and the successful search for in situ interstellar grains in meteorites.

"Bob Walker's firm conviction in the good of science brought about the creation in 1960 of VITA (Volunteers In Technical Assistance), which he served as first president," said Thomas J. Bernatowicz, Ph.D., research associate professor of physics. "At a discussion of the Mohawk Association of Scientists and Engineers, Walker asked the assembled group how much money was being channeled to the Third World for technical assistance. Appalled by the answer, he helped found VITA, which has grown to 7,000 engineers and scientists who volunteer to work on practical problems of technical development for Third World countries."

Both Lacy and Walker are fellows of the Academy of Science of St. Louis. Previous Raven Lifetime Award winners include John W. Olney, M.D., professor of psychiatry and of pathology at the School of Medicine, who was recognized in 1996, and the late Michel M. Ter-Pogossian, Ph.D., then professor emeritus of radiology at the medical school's Mallinckrodt Institute of Radiology, honored in 1995.

Retired Taiwanese supreme court justice to help judge moot court competition

A retired grand justice from the supreme court of Taiwan will serve on the panel of judges presiding over the final round of the School of Law's Philip C. Jessup International Law Moot Court Competition on Wednesday, April 2.

Herbert H. P. Ma, professor of law at National Taiwan University and a retired grand justice of the Judicial Yuan in Taiwan, will help judge the competition's final round of oral arguments. Ma will be joined by John Lonsberg, a partner at the Bryan Cave law firm in St. Louis and head of the firm's international group, and by Judge Gerald M. Smith of the Missouri Court of Appeals, Eastern District. Ma also is serving as the law school's jurist-in-residence this spring.

Associate Professor Leila Sadat Wexler, J.D., LL.M., D.E.A., the faculty adviser for the school's three-day competition, said students will compete in two-member teams by writing a brief on a challenging problem of international law

and then arguing their points before panels of judges. The written brief will be graded by the St. Louis firm of Peper, Martin, Jensen, Maichel & Hetlage.

Wexler said she is pleased the school is hosting the competition this spring because it was not held the last couple of years.

"It was revived this year due to student demand and reflects a commitment of the law school to increasing the prestige and presence of our international law programs," she said.

Wexler added that she hopes this spring's competition, as well as one set for next fall, will qualify students for the regional round of next year's international moot court program. This international program draws student competitors from more than 50 countries.

Students, faculty and staff are invited to attend the competition finals at 3 p.m. April 2 in the Bryan Cave Moot Courtroom in Anheuser-Busch Hall.

For The Record

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

Of note

Lucian V. Del Priore, M.D., Ph.D., assistant professor of ophthalmology and visual sciences and of biochemistry and molecular biophysics, has received a \$978,484 four-year grant from the National Eye Institute for a project titled "Transplantation of the Retinal Pigment Epithelium." ...

Kenneth E. Freedland, Ph.D., associate professor of psychiatry, has received a \$660,206 three-year grant from the National Institute of Mental Health for a project titled "Depression and Heart Failure in the Elderly."

On assignment

Joe Deal, professor and dean of the School of Art, recently was elected to the board of directors of the College Art Association (CAA). Deal was among three visual artists and three art historians elected in February for terms that run through the year 2001. Founded in 1911, the CAA is one of the primary advocacy groups for professional artists and art historians. The 15,000 CAA members worldwide include artists, art historians, curators, conservators and administrators who work in higher education and in museums, galleries, libraries, art organizations and individual studios. ...

Gloria W. White, vice chancellor for human resources, recently was appointed to the board of managers for the Central Institute for the Deaf (CID). The appointment was made during the CID's 82nd annual board meeting last December. White also has been re-elected as chair of the board of directors of the

Caring Program for Children. This not-for-profit organization provides health-care benefits to children whose parents earn too much to qualify for Medicaid but cannot afford to buy private health insurance.

Speaking of

John Hoal, visiting assistant professor of architecture and director of the Master's of Architecture in Urban Design Program, recently made presentations at two conferences. He presented "The Urban Design of Mixed Use and Income Neighborhoods" at the "Urban Design: Making It Work in Milwaukee Neighborhoods" conference held in Milwaukee. Hoal presented "Social Justice and Difference in the Public Realm — Investigating the Implications of Urban Form in the City of Durban, South Africa" at the "What is a City?" conference held at the University of Missouri-St. Louis' Center of Humanities.

To press

Terry Wirtel, senior personnel specialist in the Office of Human Resources, recently had a poem titled "Today's Reality" included in the book "Daybreak On the Land," published by The National Library of Poetry.

Guidelines for submitting copy:

Send your full name, complete title(s), department(s), phone number and highest-earned degree(s), along with a typed description of your noteworthy activity, to For The Record, c/o David Moessner, Campus Box 1070, or p72245md@wuvmd.wustl.edu. Items must not exceed 75 words. For information, call Moessner at (314) 935-5293.

21st Century Lecture Series features Mackinnon

Susan E. Mackinnon, M.D., professor and chief of the Division of Plastic and Reconstructive Surgery at the School of Medicine, will speak from noon to 1 p.m. April 8 as part of the spring semester's 21st Century Lecture Series. The lecture will be held in the Women's Building Lounge on the Hilltop Campus. Complimentary box lunches will be served at 11:45 a.m.

Mackinnon is known for her ground-

breaking work in the area of peripheral nerve transplantation.

The lecture series is sponsored by the Woman's Club and the Office of the Associate Vice Chancellor for Academic Planning. The lecture is free and open to the Washington University community.

Those who would like a box lunch must request one by Monday, March 31, by sending a note to: Administrative Offices, Campus Box 1080.

Campus Authors

The following is a recent release available at the Campus Bookstore in Mallinckrodt Center on the Hilltop Campus or at the Washington University Medical Bookstore in the Olin Residence Hall. For more information, call (314) 935-5500 (Hilltop Campus) or (314) 362-3240 (School of Medicine).

"Your Voice Like a Ram's Horn"

Themes and Texts in Traditional Jewish Preaching

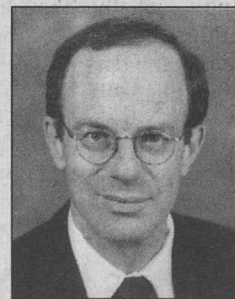
(Hebrew Union College Press: Cincinnati, 1996)

Marc E. Saperstein, Ph.D., the Gloria M. Goldstein Professor of Jewish History and Thought and chair of the Department of Jewish and Near Eastern Studies in Arts and Sciences

The 18 studies in this book continue the exploration of the Jewish sermon — an investigation Saperstein began in his groundbreaking work "Jewish Preaching 1200-1800." His new research further illustrates the importance of this genre, largely ignored by modern scholarship, as an indispensable resource for understanding Jewish history, spirituality and thought from the High Middle Ages to the beginning of the Emancipation in Europe.

The first half of the book presents thematic studies. Saperstein explores the most important occasions for traditional rabbinic preaching — the Days of Awe and the Passover season. Two studies focus on the homiletical exegesis of classical Jewish texts, and two deal with the historical interaction of Christians and Jews. He discusses the diffusion of philosophical ideas through homiletics and identifies central conceptual issues presented in the Italian Jewish pulpit. Other essays include a critical analysis of the work of Saul Levi Morteira of Amsterdam; an examination of sermons in 18th-century Prague for indications of a traditional community in crisis; and homiletical evidence for a developing sense of patriotic identification with the state, even before the Emancipation changed the legal status of Jews.

In the second half, Saperstein presents newly discovered sermonic texts to explore a full panoply of issues relating to historical context and genre. All are published for the first time, with his annotated translation accompanying the Hebrew original. Included are a "Guide for Preachers"; sermons on repentance and on the Binding of Isaac; and three eulogies — the last a fascinating memorialization of the anti-Semitic empress Maria Theresa. (Excerpted from book jacket.)



Opportunities & personnel news

Hilltop Campus

The following is a partial list of positions available on the Hilltop Campus. Information regarding these and other positions may be obtained in the Office of Human Resources, Room 130 West Campus, or by calling (314) 935-5906. Job openings also may be accessed via the World Wide Web at cf6000.wustl.edu/hr/home.

Lab Technician 970166. Department of Biology. Requirement: bachelor's degree. Responsibilities include performing molecular biology techniques in a microbial genetics lab and computer data entry. Schedule: full-time position. Application required.

Manager, Bear Necessities Shop 970203. Women's Society. Requirements: high school graduate and three or more years retail experience, including at least one year supervisory experience and purchasing and sales experience;

excellent interpersonal skills; good customer-service skills; creativity and initiative in management of store, purchasing, display of merchandise/space utilization, and promotional events; ability to establish and maintain good working relationships with vendors and to purchase items at the most favorable prices; enjoy working with students; ability to keep up to date on student preferences; strong organizational skills; entrepreneurial attitude. Schedule: part-time. Application required.

Admissions Officer 970205. Office of Undergraduate Admissions. Requirements: bachelor's degree and previous experience (preferably in admissions); ability to relate the enthusiasm for his/her undergraduate experience effectively to prospective students and parents; leadership ability; flexibility; willingness to take on hard work; strong organizational skills; self-motivation; ability to perform effectively in team and individual work settings; a "get it done" attitude. Heavy travel required. Applications are encouraged immediately and will be considered until position is filled.

Research Technician 970208. Department of Biology. Requirements: bachelor's degree; skills in using calculators; skills in using mini/microcomputers preferred; molecular biology skills, including immune response assays — AB and CMI; experience in immunology and microbiology research. Application required.

may submit résumés to the human resources office located at 4480 Clayton Ave., Campus Box 8002, St. Louis, MO, 63110. Please note that the medical school does not disclose salary information for vacancies, and the office strongly discourages inquiries to departments other than human resources. Job openings also may be accessed via the World Wide Web at <http://@medicine.wustl.edu/wumshr>.

Trainer/Computer Information and Retrieval Systems 970627-R. Requirements: associate's degree in information systems or related field; familiarity with Microsoft and Macintosh packages; knowledge of HTML preferred. Responsibilities include providing general computer-systems support and training for users; providing telephone support to users; resolving user problems or issues or directing them to the appropriate resources; providing on-site hardware and software support; and creating and maintaining World Wide Web sites.

Energy Management Technician 970732-R. Requirements: computer knowledge; AC experience. Responsibilities include providing assistance to the University by monitoring its automated systems; receiving emergency calls; and troubleshooting problems to ensure that safety is maintained. Two shifts available: 4 p.m. to midnight and midnight to 8 a.m., including some weekends.

Financial Analyst 970740-R. Requirements: bachelor's degree in business or related field and three to four years related business experience, or a master's degree in business administration or other advanced degree in related field and work experience as a summer intern (preferably two summers); excellent communication and analytical skills; creativity; resourcefulness; working knowledge of and experience with microcomputers, including FOCUS, Lotus and Microsoft Pro applications. Responsibilities include assisting with the general program and financial-planning analyses and initiatives of a \$558 million academic medical enterprise that encompasses clinical, research and teaching activities and working closely with the departmental financial/resource-planning process at the School of Medicine and with inter-institutional planning at the Medical Center.

Network Technician 970751-R. Requirements: high school graduate or equivalent; knowledge of protocol stacks (TCP/IP, DecNet, LAT, Appletalk, IPX, LAST and LAD) is a plus; experience pulling network cable and troubleshooting networks desirable; working knowledge of computer network technology; manual dexterity with small objects; ability to distinguish colors. Responsibilities include climbing ladders and pulling network cable through ceilings, closets and steam tunnels, as well as offices and labs, and troubleshooting local- and wide-area networks.

Investment-education seminars scheduled

Several investment-education seminars have been scheduled to help faculty and staff members better understand and make decisions about the Washington University retirement annuity plan.

During each seminar, representatives of the Teachers Insurance and Annuity Association-College Retirement Equities Fund (TIAA-CREF) and Vanguard will review the objectives, risks and returns for all of the University's retirement investment fund options. The consultants will help identify the different types of investors and the best strategy for maximizing potential retirement savings.

Seven seminars have been scheduled as follows:

Hilltop Campus:

- April 9: 1 to 3 p.m., May Auditorium, Simon Hall
- April 10: 9 to 11 a.m., Room 310 Anheuser-Busch Hall (law school)

Medical Campus:

- April 8: 9 to 11 a.m.
- April 9: 5:30 to 7:30 p.m.
- April 10: 1 to 3 p.m.

The above three seminars will be held in Cori Auditorium.

West Campus:

- April 8: 1 to 3 p.m.
- April 9: 9 to 11 a.m.

The above two seminars will be held in the West Campus Conference Center's Room A/B.

Staff may attend any session. Reservations and registration are not required.

For more information about the University's retirement investment funds, call TIAA-CREF at (800) 842-2733, Ext. 5509, or Vanguard at (800) 523-1188. For more information about the investment-education seminars, call the benefits office on your campus.

Medical Campus

The following is a partial list of positions available at the School of Medicine. Employees interested in submitting transfer requests should contact the Human Resources Department of the medical school at (314) 362-7202 to request applications. External candidates may call (314) 362-7195 for information regarding application procedures or

Research team finds several disease genes on chromosome X — from page 1

had a much more difficult task. They started with more than 5,000 fragments from seven different libraries of human DNA. They then identified unique landmarks on the fragments. If two pieces contained the same landmark, they knew these fragments must overlap. By painstakingly aligning all the pieces of DNA, they mapped the entire length of X.

A method for cloning large pieces of DNA made this jigsaw puzzle manageable. In the 1980s, David T. Burke, then a graduate student in the Washington University laboratory of Maynard V. Olson, Ph.D., invented the yeast artificial chromosome (YAC). As yeast cells divide, they copy the artificial chromosome over and over, generating sufficient DNA for analysis. "Because each YAC can contain hundreds of thousands of base pairs, a reasonable number of YACs fit along a chromosome," said Schlessinger, who also is a professor of molecular microbiology, of genetics and of medicine.

Finding features that could act as landmarks was another key development. In 1990, Olson and Eric D. Green, then a Washington University M.D./Ph.D. student, unveiled a strategy to use short, unique segments within YACs. These sequence-tagged sites could act as landmarks on chromosome maps the way

highway exits and rest areas punctuate road maps, the researchers reasoned. "The cleverness of this system is that it automatically gives you the landmarks and the map at the same time," Schlessinger said.

The team also had to develop new software to order and store the vast amount of data. Philip P. Green, Ph.D., devised several programs, including SEGMAP, which has proved particularly valuable. Maynard Olson and Philip Green now are at the University of Washington.

The project's completion has permitted the first comparison between a physical map and a genetic map of a chromosome. Genetic maps are constructed by studying the passage of traits from one generation to another. The closer two genes are on a chromosome, the less likely they are to get separated as chromosomes swap genetic material during egg and sperm formation. Distances on genetic maps can differ greatly from those on physical maps, however, because some regions of chromosomes recombine more often than others.

The genetic map of X has a few hundred markers. When the researchers compared it with their map of X, they found an area in the middle of the genetic map that corresponds with a much longer

stretch — 17 million base pairs — of the physical map. "So this region is uneventful on the genetic map, whereas it contains a whole bunch of markers on the physical map," Schlessinger said. "But we don't know why the X chromosome should have this large area of poor recombination."

The researchers also were able to determine how the chemical composition of X varies along the chromosome. "This gave us an early estimate of the relative density of genes across the chromosome," Schlessinger said.

The project enabled Schlessinger and colleagues to locate several disease genes as YACs containing the relevant regions of X became available. They found the gene for an overgrowth disorder called Simpson-Golabi-Behmel syndrome and a gene for ectodermal dysplasia, which impairs the development of hair follicles, teeth and sweat glands. They also were part of an international team that tracked down the gene for fragile X syndrome, the second most common cause of mental retardation. And they have mapped and are analyzing genes that prematurely halt ovarian function.

The X project began in 1987 after the invention of the YAC raised the possibility of large-scale human genome map-

ping. This prospect prompted the James S. McDonnell Foundation to establish the Center for Genetics in Medicine with a \$1.8 million grant. "The foundation funding supported the pilot studies that proved our mapping techniques would work," Schlessinger said.

In 1990, the National Institute of Human Genome Research — now the National Human Genome Research Institute — made the medical school's facility one of the first four federally funded genome centers. The institute has supported the center with two consecutive four-year grants totaling \$27.7 million. The grants funded the mapping of both X and chromosome 7. Eric Green began a high-resolution map of 7 at Washington University and completed it at the National Institutes of Health, but the data are not yet published.

Schlessinger's associates at Applied Biosystems Division, Perkin-Elmer, in San Francisco and at Washington University's Genome Sequencing Center now are sequencing portions of chromosome X, using materials and markers from the mapping project. "This will determine the entire nucleotide sequence of X and locate all the genes along the chromosome," Schlessinger said.

— Linda Sage

'Focus' class focuses on Mojave Desert during spring break — from page 1

"Studying the area provided the class wonderful policy issues superimposed on fascinating ecology, geology and natural history," Arvidson said. "We talked with park rangers, local citizens and others to better understand the issues associated with land use in the desert. We also had four graduate and three undergraduate students from 'Earth and Planetary Sciences 409' with us. Students were able to get a comprehensive look at a wonderful area."

The group stayed at the California State University Desert Studies Center in Soda Springs. They bought nearly all their food from local grocery stores. In the evenings, they returned to the Desert Studies Center, where gourmets in the group prepared dinner. They ended each day with a review of what they had observed and a preview of the following day.

Junior Judd Bowman used a small telescope to provide early glimpses of the Hale-Bopp comet. Toward the end of the excursion, which lasted from March 1-7, the traditional "Focus" touch-football game was held on Soda Lake, a dry lake, and the event was dubbed the "Dust Bowl."

The class toured Death Valley one day, making five stops to view such geological formations as cinder cones, alluvial fans, canyons and salt deposits and to experience such intriguing places as the Devil's Golf Course, Zabriski Point and Mars Hill.

Arvidson, in a pursuit involving NASA's Jet Propulsion Laboratory, has been researching the area for the testing of a robot, Rocky 7, that will be used in a series of Mars missions beginning in 2001. Over the past 2 million years, the

Mojave Desert region has experienced several wet periods that created a set of interconnected lakes. Similarly, Mars is thought to have had wet periods over its existence, and Rocky 7, or its derivative, is scheduled to rove across an ancient Martian lake bed to search for geological evidence of warm, wet conditions. The Mojave Desert terrain will simulate the Mars lake bed.

Freshman Elizabeth Dolan said taking the "Focus" sequence has influenced her thinking of what to do beyond college.

"I came here thinking I would major in history or anthropology, but after the first semester of the class, I decided I would major in environmental science instead," Dolan said. "I enjoyed getting to know Dr. Arvidson well because, in a large university, it is difficult to build good relationships with professors. The

trip was a great way to spend spring break. I'd never been to California before, and I enjoyed learning about another ecosystem and its problems. We were able to look closely at all the issues involving the Mojave Desert. The computer exercises of taking the trip virtually and making images of what we would see was helpful in giving us an idea of the landscape and geologic processes."

Added Arvidson: "From my perspective, this experience illustrates the value of students coming to a research university. They were able to take advantage of a knowledge base and infrastructure built up over many years of doing similar work, and they utilized the latest in computational techniques. These kinds of field experiences will be vital components of future Hewlett Program classes."

— Tony Fitzpatrick