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Record

Aug. 10, 2000

Volume 24 No. 35



Washington University in St. Louis



Walter Lewis, Ph.D. (front, right), professor of biology in Arts & Sciences, amidst Peruvian Aguaruna Indians and field assistants, observes the pressing of plant specimens collected for their medicinal properties. Crouching at left is Genaro Yarupaitan, a graduate student at the University of San Marcos in Peru. Working with researchers and the Aguaruna, Lewis has found that 46 percent of some 1,250 plant extracts from the Peruvian rainforest inhibit the bacterium that causes TB.

Peruvian plants hold promise for TB drugs

By BRIAN SCHNALL

Washington University researchers studying medicinal plants from the Peruvian rainforests have come across results that may significantly influence the direction of the fight against tuberculosis (TB) worldwide.

Walter H. Lewis, Ph.D., professor of biology in Arts & Sciences, and his colleagues examined about 1,250 plant extracts returned from Peru and found that 46 percent showed an inhibition against *Mycobacterium tuberculosis*, the bacterium that causes TB.

The finding is a first step toward developing potential drugs to combat the disease.

The unexpected results came after months of working with the native Aguaruna people of Peru through the International Cooperative Biodiversity Program-Peru, which seeks to identify new pharmaceutical possibilities from medicinal plants and to promote cultural and economic support to the native Indians. Lewis and his team lived among the tribe, collecting plant samples and learning about specific plants the Indians use in herbal medicinal practices.

After testing and analyzing the collected plants in St. Louis — in

collaboration with Scott Franzblau at the federal Hansen Laboratory at Louisiana State University, Baton Rouge — Lewis was intrigued by the results.

“Here’s the surprise: We would expect that in targeted medicinal plants — plants being used by indigenous people to treat a specific disease — we would find approximately 50 percent or higher activity. But we would never have anticipated 46 percent activity from a general survey of plants selected as medicinals not used to treat TB,” Lewis explained.

Through the technique of bio-directed assaying, Lewis and his fellow researchers identified the amount of reactivity present in each of the samples against various diseases, including diarrhea, leishmania and certain strains of cancer, but the inhibitions against these paled in comparison to the effectiveness of the Peruvian plants against TB.

“The results just surprised us. We didn’t realize the difference until the final results came in,” Lewis said.

Lewis presented his research at the 14th Annual Meeting of the Society for Economic Botany, held this summer at the University of South Carolina, Columbia. Results of the analyses will be published in

See **Rainforest**, page 2

Famed psychiatrist Samuel Guze dies

By JONI WESTERHOUSE

Samuel B. Guze, M.D., the Spencer T. Olin Professor of Psychiatry and former head of psychiatry and vice chancellor for medical affairs at Washington University, died Wednesday, July 19, 2000, at Barnes-Jewish Hospital from a fall complicated by polycythemia vera, a bone marrow disease. He was 76.

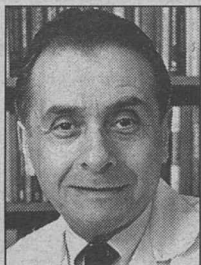
One of the most influential psychiatrists in the world, Guze and colleagues sent shock waves through the psychiatric community in the 1950s with their belief that psychiatric illness should be diagnosed just as any other physical illness — through use of a scientific medical model and a biological approach. Their ideas shaped today’s psychiatric practice.

“Sam Guze was a man ahead of his time,” said William A. Peck, M.D., executive vice chancellor for medical affairs and dean of the School of Medicine, “not only as

one of the founding fathers of the scientific approach to psychiatry, but also as an administrator. His vision for the medical school kept us progressive

and focused during times of great change.” Peck succeeded Guze as vice chancellor in 1989.

Richard W. Hudgens, M.D., professor of psychiatry, was a friend and colleague of Guze’s for 37 years. “Dr. Guze has been one of the people most responsible for the fact that in the last half of the 20th century, psychiatry has moved into the mainstream of medical science,” Hudgens said. “He has been the most articulate and consistent advocate of clinical psychiatry as a scientific endeavor.”



Guze: “A man ahead of his time”

Guze’s work also spawned great interest in the genetics of psychiatric disorders. He was among the first to use twin studies as a means of identifying the role of heredity in psychiatric illness. He and his colleagues produced key findings about genetic vulnerability to alcoholism and to other conditions such as schizophrenia and affective disorders. In addition, his research brought widespread recognition of the important role epidemiologic studies should play in psychiatric research.

An internist who switched to psychiatry, Guze once said: “I couldn’t ignore my training in internal medicine. I suggested we approach psychiatric patients the way general physicians approach all patients.” Guze also held an appointment as an associate professor of medicine in the Department of Medicine.

In 1980, Guze and his col-

See **Guze**, page 6

Stuart Kornfeld is appointed to new Farrell Professorship

By BARBRA RODRIGUEZ

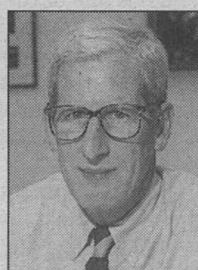
Stuart A. Kornfeld, M.D., has been chosen to fill the new David C. and Betty Farrell Professorship in Medicine at the School of Medicine, according to Chancellor Mark S. Wrighton and William A. Peck, M.D., executive vice chancellor for medical affairs and dean of the School of Medicine.

“David and Betty Farrell have contributed immensely to the St. Louis community and to Washington University,” Wrighton said. “We are grateful for their

commitment to advancing medical research and honored by their support of one of our most outstanding faculty members.”

Added Peck: “We thank the Farrells for the new professorship, and are pleased to have their names associated with the School of

See **Kornfeld**, page 6



Kornfeld: Faculty member since 1966

Anthropologist completes first full survey of Missouri’s rock images

By DEB ARONSON

Carol Diaz-Granados, Ph.D., research associate and lecturer in the Department of Anthropology in Arts & Sciences, has doubled the known number of Missouri’s native American rock images — petroglyphs and pictographs — in the state’s first systematic survey of prehistoric “rock art.”

Rock art refers to both petroglyphs (carvings in stone) and pictographs (painted or drawn images).

Diaz-Granados’ findings have been published in a book titled “The Petroglyphs and Pictographs of Missouri,” which documents

134 sites of rock art images. Only 65 to 70 were known before she began her work in 1983.

“I personally prefer the term ‘rock images’ or ‘rock graphics,’ because I believe they are more about communication than about art,” said Diaz-Granados, who has made petroglyphs and pictographs her life’s work. “The Petroglyphs and Pictographs of Missouri,” which was based on her two-volume dissertation, contains 86 drawings and 36 photographs and was published by the University of Alabama Press this spring. Diaz-Granados’ husband, Jim Duncan, is listed as a co-author because of his help in the field and contributions to the

section on mythology.

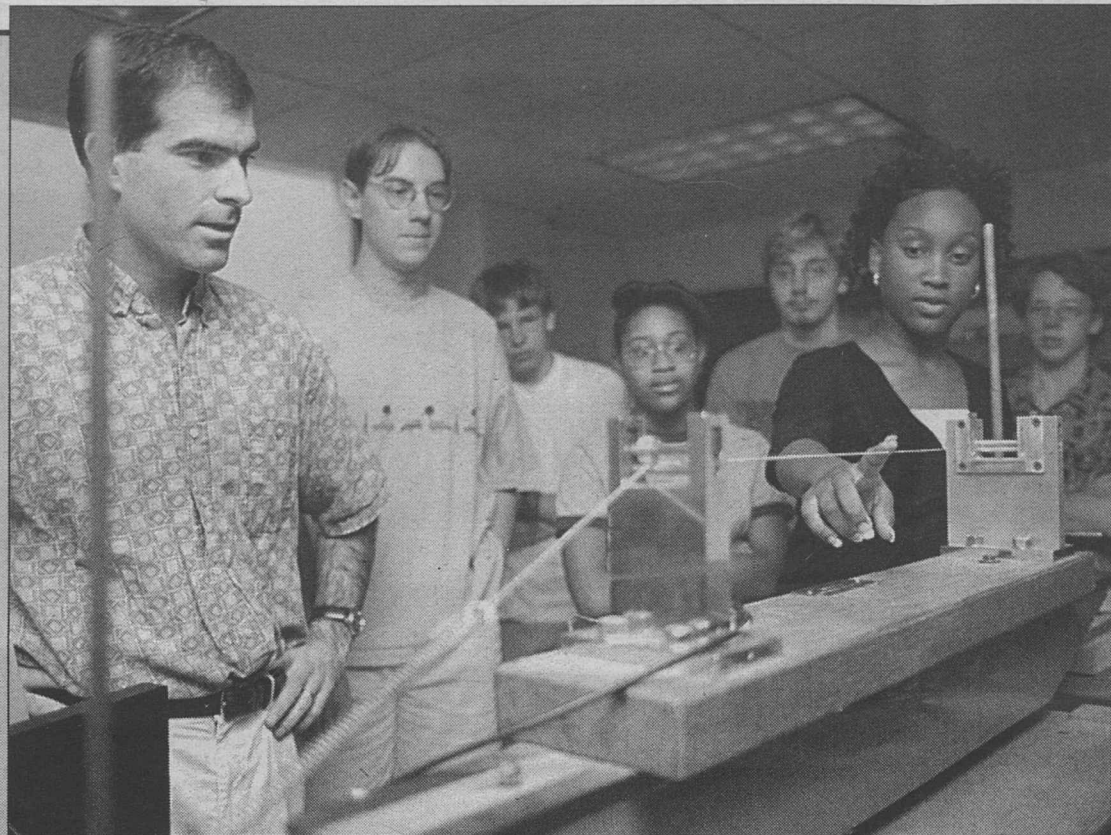
Petroglyphs and pictographs are found all over the state, according to Diaz-Granados. “Where there is rock,” she said, “you usually find rock art.” Petroglyphs are found on exposed boulders, bluffs, near springs, and usually on dolomite, but sometimes sandstone, limestone or granite. Pictographs are almost always on sandstone and usually in slightly protected areas, such as under a bluff overhang or inside a shelter or cave.

“People don’t think of Missouri as being a Mecca for rock art, but we do have an unusually large number of sites in

See **Rock images**, page 5



Carol Diaz-Granados, Ph.D., takes an acetate tracing of a petroglyph in Gasconade County, west of St. Louis.



Excitation Philip V. Bayly, Ph.D. (left), associate professor of mechanical engineering, demonstrates for students from St. Louis' Metro High School the response of a string to excitation. The students examined oscillations by looking at the system with a strobe light, and thus observed a classic instance of nonlinear behavior. Students were on the engineering campus and at Boeing Co. laboratories for seven weeks this summer as part of the Boeing/Washington University Advanced Manufacturing Research and Development program with the school, intended to expose bright students to engineering careers. Jerry Halley, a Boeing employee and Bayly's graduate student in mechanical engineering, coordinated the program.

Rainforest

Plants hold promise of TB treatment

— from page 1

the forthcoming issue of Pharmaceutical Biology. The research is supported by the National Institutes of Health and the National Science Foundation.

Tuberculosis remains a serious health problem in the United States and worldwide. The World Health Organization (WHO) reports that TB kills up to 3 million people each year, and 18,199 new cases of the disease were reported in the United States in 1998. Additionally, the WHO estimates that one-third of the world's population is infected with *M. tuberculosis*.

"TB is one of the most deadly diseases of our time," Lewis said. "It has made a comeback, but 46 percent of our samples with TB inhibition is an incredibly encouraging result so early in the research."

The development of certain drug-resistant strains of tuberculosis combined with the spread of the HIV virus can account for the recent comeback of this deadly disease. For these reasons, tuberculosis possibly represents "the most threatening resurgent disease today among the immunocompromised and immunocompetent, and the need

for new drugs is paramount," Lewis stated in the journal article.

Fortunately, the exposure of TB in the remote parts of the Upper Amazon has been minimal, and the native tribes, including the Aguaruna, have little experience with the disease, making the discovery of the inhibitory plant samples even more significant.

Walter Lewis and his wife, Memory Elvin-Lewis, Ph.D., professor of microbiology and ethnobotany in Arts & Sciences, have made numerous trips to the Peruvian rainforests since the

becomes as crucial for the Washington University team as discovering new medicinal plant species.

A prime reason that tropical rainforest plants are so valuable is that they produce above-average amounts of secondary metabolites, such as alkaloids, compounds that protect them from huge numbers of pathogens and insects. Plant survival is dependent on their genetic ability to produce a wide range of these defensive compounds. Lewis believes he found such a high anti-TB reactivity across the

broad range of plants because the plants have shared sensitivities that "allow secondary metabolites to inhibit the growth of *M. tuberculosis* at these unexpectedly high frequencies," he said.

The amount of activity against TB was surprising partly because biologists were not expecting the plants to be so specifically effective against it. "If you can find the diseases of humans that the plants are already fighting to stay alive, then we should be looking for those plants and their compounds to provide new pharmaceuticals to cure diseases and improve human health worldwide," Lewis said.

early 1980s to learn about the medicinal plants used by the native tribes.

The Aguaruna, a tribe of the Jivaro Indians of the Upper Amazon Basin, still rely largely on memorization and oral transmission of their knowledge of medicinal plants to survive. However, as increasing numbers of younger Aguaruna are exposed to the outside world, many lose interest in learning the practice of herbal medicine. Thus, with fewer numbers of Aguaruna willing to learn all of the medicinal wonders and knowledge of their elders, medicinal plant knowledge could be lost forever. Recording this knowledge and documenting it thus

"TB is one of the most deadly diseases of our time. It has made a comeback, but 46 percent of our samples with TB inhibition is an incredibly encouraging result so early in the research."

WALTER H. LEWIS

Firm gives University three valuable patents

By TONY FITZPATRICK

Praxair Inc., of Danbury, Conn., has donated three valuable patents to Washington University, to be incorporated into research directed by Milorad P. "Mike" Dudukovic, Ph.D., the Laura and William Jens Professor of Environmental Engineering and chair of chemical engineering, and Muthanna Al-Dahhan, Ph.D., assistant professor of chemical engineering. Dudukovic directs the University's Chemical Reaction Engineering Laboratory (CREL), and Al-Dahhan is associate director.

CREL is an global consortium of 20 international companies spanning five continents, all involved with multiphase reactors, extremely complex systems used by the petrochemical and chemical industries. In 1999, Praxair joined the CREL consortium.

Praxair is one of the world's largest producers and distributors of oxygen, nitrogen, hydrogen, carbon dioxide and specialty gases to customers in the petrochemical, metals, food, health-care, semiconductor and other diverse industries. It is the largest industrial gases company in the Americas and one of the largest worldwide, with 1999 sales of \$4.6 billion.

The patents donated relate to a technology called the Liquid Oxidation Reactor (LOR), a reaction process system that can benefit the production of aromatic acids, especially terephthalic acid. Terephthalic acid is a key intermediate in the production of the polyester commonly used in soda bottles and in many synthetic fibers. Praxair donated the patents to the University because the company is moving in a different research direction, and it recognized that CREL researchers are better able to develop the patented technology.

The patents improve LOR aromatic acids production by switching from air as the oxidant in the process to oxygen. The equipment and technology covered by the patents allow researchers to use oxygen safely

and efficiently in these reactions.

At CREL, Dudukovic has pioneered the use of computer-aided radioactive particle tracking (CARPT) and has combined it with what has long been a medical technology — computer-assisted tomography (CAT). These techniques in tandem are not in use at any other reaction engineering laboratory in the world. In combination, CAT and CARPT allow a non-invasive determination of the flow pattern for different types of multiphase reactors, which involve complex interactions of various gas-liquid combinations and development of models for them.

"Praxair has long been aware of the fine research in multiphase reaction engineering conducted at Washington University under the leadership of Mike Dudukovic," said David A. Haid, the company's director of applications in research and develop-

"We're happy that Praxair recognizes our talents, abilities and our international reach with CREL. We're confident that the technology to come out of this research will be strengthened and broadened."

THEODORE J. CICERO

ment. "This is a win-win situation for Praxair, Washington University and the technology we're transferring. Our business strategy has changed, and the University mission is just what the technology needs. It's a great fit. There is a long history with these patents, which involves lots of work begun in the early '80s. We felt it was best to turn this technology over to people who can do the most for it."

Theodore J. Cicero, vice chancellor for research, expressed gratitude for the donation. "We are delighted to receive the patents, which are useful in opening up new directions for research at CREL," Cicero said. "We're happy that Praxair recognizes our talents, abilities and our international reach with CREL. We're confident that the technology to come out of this research will be strengthened and broadened."

Added Dudukovic: "CREL's methodology for scale-up and design of multiphase systems, which is well regarded by all our sponsors and the international reaction engineering community, should be quite helpful in implementing safe use of oxygen in liquid phase oxidation of organics."

News Briefs

Election fever

Understand the upcoming national election by taking one of the new political science courses offered this fall through University College, the evening division of Arts & Sciences.

"American Electoral Politics: Election 2000" and "Topics in Politics: The Nature and Forms of Ideology" are just two of the almost 200 courses that eligible employees may enroll in now through Aug. 25. Full-time staff and their spouses or domestic partners receive a 50 percent tuition remission. Classes are offered in the evenings and on Saturdays. For more information, visit www.artsci.wustl.edu/~ucollege/ or call 935-6700.



Campus quiz: This sleepy-eyed fellow and his juggling pins adorn which Hilltop Campus building? Answer below.

Volunteers sought

Volunteers are being sought for a two-year study to learn about preventing weight gain during menopause. Healthy women ages 42 to 55 with early signs of menopause are eligible. Subjects will be randomized to a control group or a lifestyle intervention group and will be tested at the beginning, six months, one and two years. Benefits include free body composition and metabolic rate measurements, free diet consultation, and payment for testing at six months, one and two years. For more information, call Darlene Johnston, Ph.D., 747-3182 (e-mail: djohnsto@im.wustl.edu). Susan B. Racette, Ph.D., research instructor in medicine, is principal investigator.

Answer: Our juggler can be found on the old Field House.

Record

Washington University community news

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Washington University in St. Louis

Medical School Update

Researchers find lowering systolic blood pressure reduces incidence of stroke

By JIM DRYDEN

Researchers have found that many strokes can be prevented by medications that lower isolated systolic hypertension, a condition that appears after 55 and increases with age. Historically, physicians have paid more attention to diastolic blood pressure, but this study found that lowering systolic pressure below 160 mm Hg (millimeters of mercury) lowered the stroke rate by one-third. And decreasing systolic pressure to lower than 150 reduced stroke risk even more.

In the July 26, 2000, issue of the *Journal of the American Medical Association*, H. Mitchell

Perry, M.D., professor emeritus of medicine at the School of Medicine and physician coordinator for hypertension for the U.S. Department of Veterans Affairs, and colleagues report that controlling systolic pressure helps prevent both hemorrhagic and ischemic strokes.

Hemorrhagic strokes are caused by the rupture of blood vessels in the brain. Ischemic strokes are the result of interrupting blood flow to the brain, either because of a clot or plaque buildup inside a vessel supplying blood to the brain.

"The decrease in the incidence of strokes in those who achieved systolic blood pressure goals of less than 160 or less than 150 mm

Hg should encourage physicians and patients to strive for such goals," Perry said. "Our findings strongly suggest that the level of systolic blood pressure is the main factor in reducing the incidence of stroke."

Perry and colleagues examined data from the Systolic Hypertension in the Elderly Program (SHEP), a double-blind, randomized, placebo-controlled trial designed to learn whether drug treatment to lower blood pressure would reduce the frequency of strokes.

The SHEP study was conducted at 16 clinical centers around the United States. It followed more than 4,700 men and women who were 60 or

older and had isolated systolic hypertension. The systolic number is the upper number in a blood pressure reading. Patients with isolated systolic hypertension have a systolic blood pressure of 140 mm Hg or higher and a diastolic pressure below 90 mm Hg.

In SHEP, patients were randomly assigned either to an inactive placebo or the antihypertensive diuretic drug chlorthalidone. Those patients on active treatment whose blood pressure was not controlled received a second drug, the beta-blocker atenolol. Those participants unable to take beta-blockers received low doses of the drug reserpine.

At the end of the trial, 46 percent of those randomized

to active treatment were receiving only the step one study drug and 23 percent were receiving the step one and step two study drugs. However, almost 90 percent of those in the active treatment group were receiving some blood pressure-lowering drug throughout the study.

Some of those enrolled in the study's placebo group also took other drugs to lower blood pressure. The percentage increased steadily from only 13 percent at one year to 44 percent by year five.

When the study concluded, 65 percent of those in the active systolic treatment group and 40 percent in the placebo group were at the study's

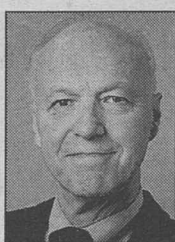
See **Stroke**, page 6

Two professors honored for research

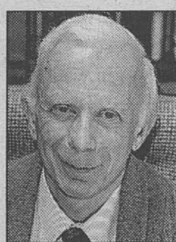
Leonard Berg, M.D., and John O. Holloszy, M.D., who have both given many years of service to the School of Medicine, have received career-crowning honors.

Berg, professor emeritus of neurology and founder and former director of the Alzheimer's Disease Research Center, is one of five recipients of the Lifetime Achievement Award for distinguished research in Alzheimer's disease from the seventh International Alzheimer's Disease and Related Disorders Conference. The award was presented in July during the World Alzheimer Congress 2000 in Washington, D.C.

Berg received the award in recognition of his impact on international Alzheimer's research. Among his noted accomplishments is the Clinical Dementia



Berg: Honored in Washington, D.C.



Holloszy: Bound for the Olympics

Rating system, which he developed to distinguish among different stages of Alzheimer's disease and normal aging.

A graduate of Washington University (1945) and the School of Medicine (1949), the St. Louis native joined the medical school faculty in 1955.

Holloszy, professor of medicine, chief of the Division of Geriatrics and Gerontology and director of the section of applied

physiology, has been recognized by the International Olympics Committee (IOC) Medical Commission with the 2000 IOC Olympic Prize in Sport Sciences endowed by Pfizer. The commission lauded his leadership in uncovering the mystery behind the correlation between muscle adaption during exercise and its effect on the overall health of the human body, noting that his discoveries have led to breakthroughs in preventive medicine as it relates to heart disease, diabetes, obesity and the elderly.

Holloszy will receive \$500,000, a certificate of excellence and an Olympic medal at the games in Sydney, Australia, Sept. 10.

Born in Austria, Holloszy graduated from the School of Medicine in 1957 and joined the faculty in 1965.

Genome Sequencing Center receives \$5 million grant

The School of Medicine's Genome Sequencing Center has received a \$5 million grant from The National Human Genome Research Institute. The award will fund the final phase of a collaborative effort to identify variations in the DNA sequence between individuals.

"We're all very similar genetically," said John D. McPherson, Ph.D., assistant professor of genetics and co-director of the center, "but there is a 0.1 percent difference." The genomes of any two people vary by approximately 1 base pair—the smallest unit of genetic information—out of 1,000. These variances are called Single Nucleotide Polymorphisms, or SNPs.

The research project began in April 1999, when an international collaboration called the SNP Consortium was established with funding from charitable trusts and pharma-

ceutical companies. Twenty-four anonymous donors of varying ethnic groups and nationalities provided their DNA, which was put into a common bank, then divided into manageable lengths for sequencing. The work is being performed by the medical school, the Whitehead Institute for Biomedical Research in Cambridge, Mass., and the Sanger Centre in the United Kingdom.

Because SNPs occur frequently and are distributed evenly through the full complement of human DNA, they make valuable place-markers. A high-density SNP map will help researchers locate disease genes and will complement the working draft of the human genome, completion of which was announced at the White House June 26.

The project will have other benefits. "I think the widest impact of our work is likely to be that it will help tailor medicines

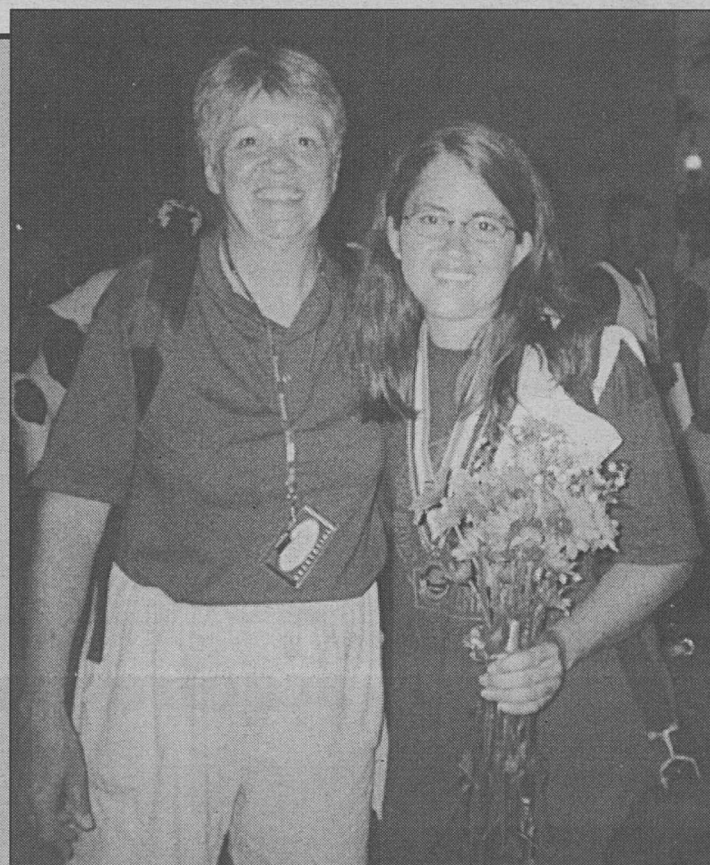
to the individual," McPherson said. Knowing a patient's genetic profile will enable the physician to choose the most effective drug and avoid ones that would cause side effects. The SNP Consortium's data also could speed the development of new drugs.

In addition, it could help biomedical researchers learn why some people are more likely than others to develop diseases such as cancer or Alzheimer's. It also could be a boon to anthropologists, who will trace shifts in SNPs among human populations in order to study evolution, as well as to track the movements of groups of people throughout history.

The project will be completed by December 2000. McPherson said that the three sequencing centers hope to find more than half a million SNPs, surpassing the consortium's original goal of 300,000. The centers are releasing their data on the Internet, making it available to researchers around the world free of charge.

Continuing Medical Education offers course

A comprehensive internal medicine review course will be held Aug. 24-27 at the Eric P. Newman Education Center. Presented by the Division of Medical Education and Department of Internal Medicine, the course is designed for physicians seeking recertification by the American Board of Internal Medicine, as well as those seeking a concise update on important topics in the field. CME credit is offered up to 32.5 hours. For more information, call 362-6891 or visit the CME Web site (cme.wustl.edu).



Winning partnership Amy Holdorf (right) wears the gold medal she won at the U.S. Transplant Games, held June 21-24 in Lake Buena Vista, Fla. Her mother, Diane (left), made a vital contribution to the victory in the 100-meter butterfly when she donated a kidney to her daughter six years ago. The games, sponsored by the National Kidney Foundation, are held every two years, and are open to anyone who has had a lifesaving organ transplant. Holdorf captained a team of 28 athletes from the St. Louis area. She is studying for a Ph.D. in immunology at the School of Medicine.

School receives \$21.2 million in grants

Individual faculty members and an institution at the School of Medicine recently have received grants of \$1 million or more to fund research on a wide range of subjects.

The Alzheimer's Disease Research Center has received a five-year \$12.4 million grant from the National Institute on Aging, which has funded the center since 1985. Eugene M. Johnson Jr., Ph.D., the Norman J. Stupp Professor of Neurology and professor of molecular biology and pharmacology, and John C. Morris, M.D., the Harvey A. and Dorismae Hacker Friedman Professor of Neurology, co-direct the center, which involves researchers from more than 20 fields.

Timothy J. Ley, M.D., the Alan A. and Edith L. Wolff Professor of Medicine and professor of genetics, recently received three five-year grants from the National Institutes of Health totaling \$4.9 million. Ley, who directs the Division of Oncology's stem cell biology section, was honored for his scientific expertise by receiving MERIT status for one of the grants.

The MERIT (Method to Extend Research in Time) grant for \$1.2 million from the National

Institutes of Diabetes and Digestive and Kidney Diseases (NIDDK) will allow Ley to develop new genetic strategies for treating inherited blood diseases, namely sickle cell anemia and beta-thalassemia.

Mark Johnston, Ph.D., professor of genetics, has received a four-year \$1.5 million grant from the National Institute of General Medical Sciences. Johnston will study how yeast cells detect glucose and make efficient use of it.

Michael G. Caparon, Ph.D., associate professor of molecular microbiology, has received a second grant to study the flesh-eating bacterium *Streptococcus pyogenes*. The five-year \$1.2 million award comes from the National Institute of Allergy and Infectious Diseases.

David R. Pivnick-Worms, M.D., Ph.D., professor of radiology and of molecular biology and pharmacology, has received a three-year \$1.2 million grant from the National Cancer Institute. The planning grant will fund efforts to establish a Molecular Imaging Center focused on cancer at Washington University Medical Center.

Apply now for cancer research grants

Applications now are being accepted for awards from the University's American Cancer Society Institutional Research Grant Committee (ACS-IRG). Applications are due by 4 p.m. Sept. 15.

The program provides seed money for new projects initiated by junior faculty members. Only instructors and assistant professors are eligible. Individuals who previously have received these awards or major grants from the National Institutes of Health, the National Science Foundation, the American Cancer Society or Veterans Affairs are not eligible. Applicants must be U.S. citizens or

have proof of permanent residency at the time of application.

Each application should include a letter from the department chair vouching for the independence of the investigator. All new cancer-related research that will involve human subjects must first be reviewed and approved by the Siteman Cancer Cancer Protocol Review and Monitoring Committee.

For more information, investigators may call David B. Wilson, M.D., Ph.D., committee chair, at 286-2834, or e-mail Sharon E. Heath (sharon@ccadmin.wustl.edu) to obtain an application.

University Events

Diabetes • Orientation Mass • Clinical Allergy • InsideOUT

"University Events" lists a portion of the activities taking place at Washington University Aug. 10-Sept. 2. Visit the Web for expanded calendars for the School of Medicine (medschool.wustl.edu/events/) and the Hilltop Campus (cf6000.wustl.edu/calendar/events/).

Student Center, 6352 Forsyth Blvd.
935-9191.

And more...

Friday, Aug. 18

7:30 a.m. Continuing Medical Education program. "Clinical Allergy for the Practicing Physician." (Continues through Aug. 19.) Cost: \$295, physicians; \$200, allied health professionals (includes breakfasts, luncheon and a baseball ticket). Eric P. Newman Education Center. For registration, call 362-6891.

Thursday, Aug. 24

7:30 a.m. Continuing Medical Education program. "Comprehensive Internal Medicine Review and Recertification Course." (Continues through Aug. 27.) Cost: \$645, physicians; \$445 residents/fellows, allied health professionals (includes breakfasts and luncheons). Eric P. Newman Education Center. For registration, call 362-6891.

7:30 p.m. Convocation. Chancellor Mark S. Wrighton welcomes the Class of 2004. Athletic Complex. 935-6679.

Friday, Aug. 25

8 p.m. Orientation 2000 Wash U Night. InsideOUT, jazz quartet, will perform. Brandt's Market and Café, 6525 Delmar Blvd., University City. 726-2726.

Saturday, Aug. 26

11:30 a.m. Bears, BBQ and Fun. Lunch for incoming freshmen and their families and football scrimmage. Francis Field. 935-6679.

Lectures

Friday, Aug. 11

9:15 a.m. Pediatric Grand Rounds. "Update on the Pathophysiology of Diabetes." Kenneth S. Polonsky, the Adolphus Busch Prof. of medicine and dept. chair. Clopton Aud., 4950 Children's Place. 454-6006.

Friday, Aug. 25

9:15 a.m. Pediatric Grand Rounds. "The 'Renal' Fanconi Syndrome." Anne M. Beck, asst. prof. of pediatrics, pediatric nephrology div. Clopton Aud., 4950 Children's Place. 454-6006.

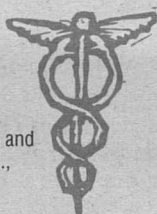
Worship

Tuesday, Aug. 15

Noon. Feast of the Assumption Mass. Catholic Student Center, 6352 Forsyth Blvd. 935-9191.

Saturday, Aug. 26

4 p.m. Orientation weekend Mass. (Also Aug. 27, 11 a.m. and 9 p.m.) Catholic



University opens arms for orientation

By DAVID MOESSNER

The Class of 2004 is coming — and awaiting that group of students is some good old-fashioned friendliness and a host of new opportunities.

Orientation 2000, a weeklong program that begins Aug. 24 and lasts through Aug. 29, is designed to enlighten new students and their parents about what Washington University has to offer, said Bill Woodward, director of orientation.

"We want to give students a glimpse of what awaits them, both academically and socially," Woodward said. "Orientation Week is designed to introduce students to new opportunities and to generate some bonds. It's important to let them know that they're not alone in their experience."

After a number of smaller events Aug. 24, new students will gather for residence hall floor meetings from 5:30 to 6:45 p.m. Afterward, Chancellor Mark S. Wrighton will welcome the entire class to Convocation, held at 7:30 p.m. at the Athletic Complex. Also addressing the class will be Lee Epstein, Ph.D., the Edward Mallinckrodt Distinguished University Professor of Political Science; senior student representative Pankaj Sharma; and Robin and Patricia Klaus, co-chairs of the Parents' Council.

Immediately following Convocation, students will form the Chancellor's procession to the Quad and enjoy some evening entertainment.

The focus shifts Aug. 25, as an array of departmental open houses and deans' meetings are slated from 1 to 4 p.m., giving students an opportunity to meet with representatives from the faculty and staff and to learn more about the curriculum.

Aug. 26 will feature the annual "Bears, BBQ and Fun" luncheon from 11:30 a.m. to 1 p.m. While picnicking, students and their families will cheer on the nationally ranked football Bears, who will scrimmage against Millikin University.

Later that day, the doors to the residential colleges will be open for a reception in which students and parents can meet staff members and fellow residents.

Highlighting the evening is "Choices 101: An Introduction to the First Year Experience" — a series of thought-provoking and entertaining skits about the first year in college, presented by upperclass students. Afterward, upperclass students will lead a discussion about the Choices 101 program and provide more specific information about important issues and resources on campus. The day will conclude with social options, including a Campus Program-

ming Council-sponsored performance by comedian Eric O'Shea and a movie sponsored by the Association of Black Students.

Aug. 27 opens with worship opportunities. After a full day of adviser meetings, the day will conclude with an "Evening of Fun at the Science Center" from 7 to 11 p.m. Buses will take students for hands-on science exhibits, an Omnimax Theatre presentation of the film, "Thrill Ride: The Science of Fun," and swing dancing.

Aug. 28 features more open houses and tours, before a mandatory presentation titled "When a Kiss is Not Just a Kiss." This interactive theatrical presentation examines the issue of sexual assault and alcohol on college campuses. After performance and large-group discussion, students will break out into discussion groups by residence floors.

Picnics and meetings fill the schedule Aug. 29 and 30. The Aug. 29 social schedule concludes with an outdoor movie in the Swamp on the South 40.

Also scheduled during the week are a variety of events designed especially for international, commuter and transfer students.

For more information, call 935-6679, or check the orientation home page (<http://rescomp.wustl.edu/orientation>).

Olin Library acquires 'Triple Crown Collection' of rare books

By LIAM OTTEN

Washington University's Olin Library has acquired a major collection of rare Arts and Crafts-era books and related ephemera. The aptly named "Triple Crown Collection" includes 150 volumes printed by the Kelmscott, Doves and Ashendene presses. Combined with the University's existing holdings, the collection represents virtually the complete published output of the three presses, which together mark the epitome of fine bookmaking in England.

"The acquisition of this collection is no mincing step, but vaults our already strong holdings into a new dimension," said Shirley K. Baker, dean of University Libraries and vice chancellor for information technology. "Our faculty and students will profit from having this collection here, and it will serve researchers around the world."

In addition to printed books, the collection includes hundreds of supplementary items documenting both the artistic and business processes behind many of the volumes' creation. These range from proof pages and correspondence to inscribed volumes, alternate bindings, sketches by Kelmscott founder William Morris and even original woodcut printing blocks. Highlights include:

- **"The English Bible"** (1903-05), designed by T.J. Cobden-Sandersons and published by the Doves Press. The five-volume set is considered one of the masterpieces of fine press bookmaking. Related materials include a proof page featuring red, hand-lettered drafts of the familiar opening line of Genesis and an extremely rare fragment of 16 leaves from



Original woodcut printing blocks from the Triple Crown Collection, an extensive archive of Arts and Crafts-era books and related ephemera from the Kelmscott, Doves and Ashendene presses. The collection, built by Californian Charles Gould over a period of 68 years, recently was acquired by Olin Libraries' Special Collections.

Volume II printed on vellum.

- **"Ballads and Narrative Poems"** (1893), by Dante Gabriel Rossetti, published by the Kelmscott Press and inscribed by William Morris to Sidney Cockerell, secretary of the press. Tipped in the volume are two leaves of original initials by Morris and a letter to Cockerell concerning the work of artist Edward Burne-Jones.

- **"Song of Solomon"** (1902), published by the Ashendene Press with hand-drawn illuminations

throughout the text by Florence Kingsford. The volume is printed on vellum and is inscribed by press founder and chief designer St. John Hornby to his brother.

"The acquisition of this collection is no mincing step, but vaults our already strong holdings into a new dimension."

SHIRLEY K. BAKER

process behind their creation," said Anne Posega, head of Olin Libraries' Special Collections. "For students in the Nancy Spirtas Kranzberg Studio for the Illustrated Book or the School of

Art's graphic design program, for example, it's very helpful to be able to see the designers experimenting with things like different page layouts or typefaces."

Derek Hirst, Ph.D., the William Eliot Smith Professor of History, said the collection "would have an immediate teaching use; it would bring into the library books so beautiful that even the most inveterate cybernaut might change direction."

Californian Charles Gould built the "Triple Crown Collection" over a period of 68 years; Gould acquired his first Doves book in 1932 and soon expanded his collection to include Kelmscott and then Ashendene works. Bromer Booksellers Inc., of Boston, purchased the collection from Gould in April of this year.

The University was alerted to the collection's availability by a book collector and member of the libraries' National Council. The purchase was made possible in part by the University's Philip Mills Arnold Endowment Fund and by the generosity of an anonymous donor.

The Arts and Crafts movement began in England in the late 19th century, inspired by the social concerns of artists and writers like Walter Crane and John Ruskin. The movement, which would exert lasting influence on 20th-century art, architecture, design and book-making, aimed to create beautiful, well-crafted objects that would both enhance the lives of ordinary people and provide employment for skilled artisans.

William Morris, the movement's most influential figure, founded the Kelmscott Press in 1891 in response to the poor-quality products that often resulted from mechanized printing, choosing instead to use carefully crafted papers, handset type, fine illustrations and sturdy, attractive bindings. Kelmscott was soon joined by Ashendene Press in 1894 and Doves Press in 1900.

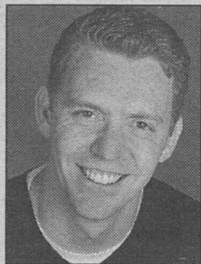
Richard W. Davis, Ph.D., professor of history and director of the Center for the History of Freedom, observed that the collection "represents a very important cultural phenomenon. Also, insofar as it reflects the taste and attitudes of William Morris and his circle, it has social and political implications as well."

The Triple Crown purchase comes one year after the University's acquisition of the famed "Kelmscott Chaucer" (1896), generally considered Morris' bookmaking masterpiece. An exhibition and symposium based on the Triple Crown Collection will be scheduled for the fall of 2001.

Alumnus Charles Robin is new Edison director

By LIAM OTTEN

Charles Robin has been named managing director of Washington University's Edison Theatre, according to Edward S. Macias, Ph.D., executive vice chancellor and dean of Arts & Sciences. Robin, an alumnus of the University, will oversee the theater's annual OVATIONS! Series, which brings nationally and internationally known music,



Robin: Background in arts and business

theater and dance artists to campus. The appointment follows a national search and took effect Aug. 7. "I'm absolutely delighted that one of Washington

University's own graduates will return to fill the important job of directing Edison Theatre," Macias said. "Charlie is ideally suited to building on Edison's existing strengths — its national reputation and wide range of interesting programming — while at the same time connecting that programming to our central mission of education.

"I know that the entire University community will benefit from Charlie's broad vision," Macias went on. "With a strong background in both performing arts and business, he has demonstrated a real talent for balancing all kinds of acts, and I know he will do a great job."

Added Robert E. Wiltenburg, Ph.D., dean of University College,

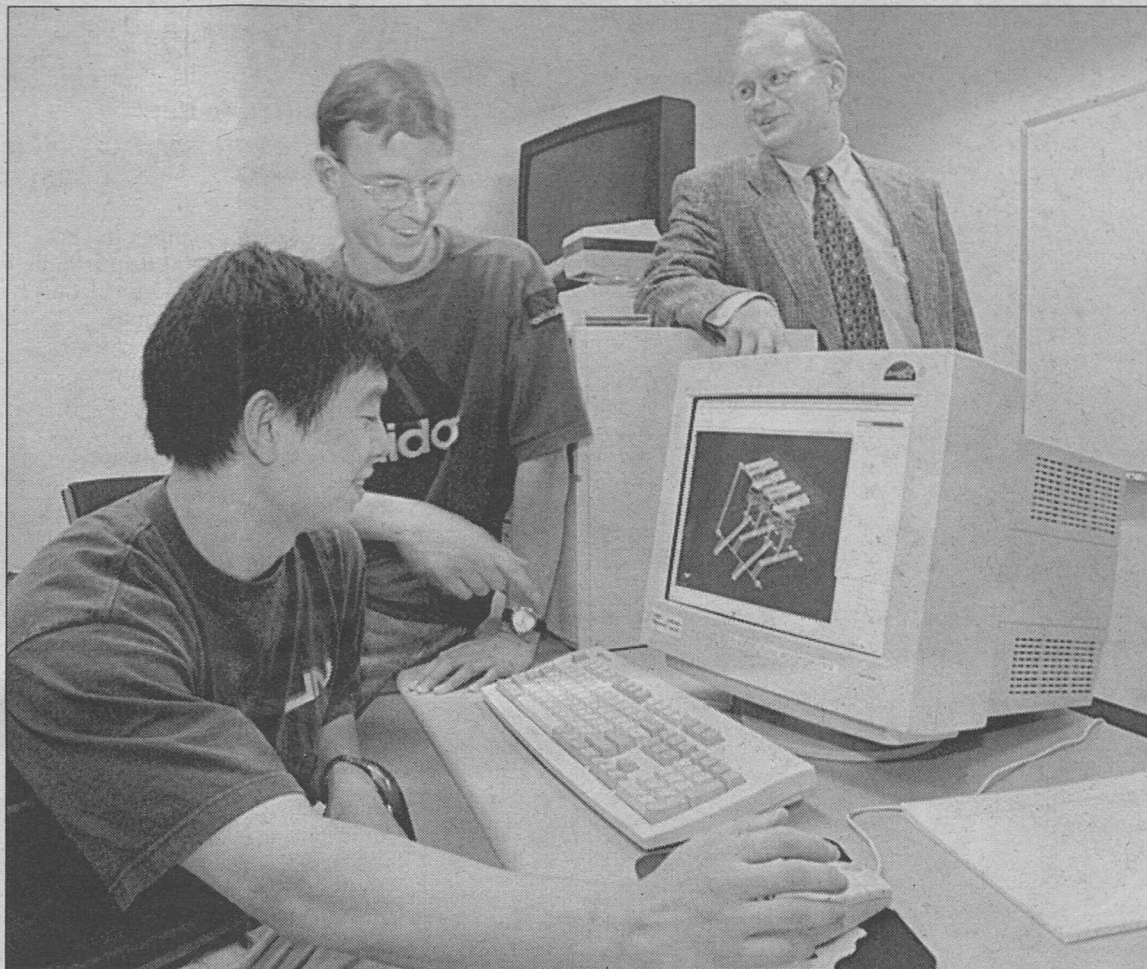
assistant dean of Arts & Sciences and chair of the search committee: "After conducting a national search we were delighted to discover Charlie right here at home. He brings to the job not only considerable experience of the local arts scene but a strong commitment to making Edison a valuable part of the University's educational enterprise."

Robin expressed excitement about his new post. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "The Edison is known regionally and nationally for the extraordinary work it presents. I look forward to carrying on that tradition and to renewing friendships with our subscribers, patrons and members of both the University and surrounding communities."

Robin, who served as the Edison's operations manager from 1987-1993, returns to the University from the Circus Arts Foundation of Missouri, where he served as executive director of Circus Flora, and from Laumeier Sculpture Park, where he was performing arts/entertainment coordinator.

Robin is a member of the Gateway Men's Chorus, where he is choreographer and baritone section leader. Over the years he has served on boards and consulted for numerous local arts organizations, including the Missouri Arts Council and the St. Louis Conservatory and School for the Arts.

Robin earned a bachelor of science degree in 1987 from the John M. Olin School of Business, with a minor in music.



John Hu (left), first-year graduate student in mechanical engineering, and Joseph Herman, junior mechanical engineering major, view a design of a variable stroke engine in Jolley Hall's computer-aided design laboratory as Mark J. Jakiela, Ph.D., the Lee Hunter Professor of Mechanical Design, looks on. The model was designed by mechanical engineering senior Christopher Zpevak, who used Unigraphics Solutions Solid Edge and Unigraphics software for the project. Unigraphics Solutions Inc. and the engineering school have teamed up in a \$4.5 million partnership that allows mechanical engineering students to use Unigraphics software.

Partnership provides advanced software

By TONY FITZPATRICK

Under an imaginative new partnership between the School of Engineering and Applied Science and St. Louis' Unigraphics Solutions Inc. (UGS), two computer-assisted design (CAD) software packages worth \$4.5 million have been made available to the University's engineering students.

Students in mechanical engineering design courses have been using both packages. The first, Unigraphics, a broad-based mechanical engineering aid, allows students — and engineers on the job — to design objects and assemblies of objects, providing realistic animations to test a system's components and mechanically simulate machines. The second, Solid Edge, is a dimension-driven parametric system that greatly facilitates the initial modeling of objects. Students in introductory mechani-

cal design courses use Solid Edge, while students in junior- and senior-level courses use both software packages.

"Just three years ago, our advanced undergraduates were not exposed to this kind of CAD experience," said Mark J. Jakiela, Ph.D., the Lee Hunter Professor of Mechanical Design, who initiated the partnership with Unigraphics Solutions. Jakiela and Jerry Craig, adjunct professor of mechanical engineering, teach the design courses that use the software.

"We've found that exposure to the real-world materials makes teaching design concepts much less abstract and more descriptive," Jakiela continued. "The software prepares students for the world after college. It has improved both teaching and learning, and we're grateful for Unigraphics System's support."

Added Craig: "Solid Edge immediately places the students in a 3-D design environment. The

ability to model complex shapes and view the results in solid-shaded form greatly increases visualization. Design changes are quickly implemented, and design intent can be monitored through the use of constraints. Our students are using the finest tools available."

Randall Walti, Unigraphics vice president and general counsel, expressed his firm's enthusiasm for the venture. "Unigraphics Solutions is proud to partner with Washington University, one of the nation's premier education and research institutions, in empowering knowledge for 21st-century engineers," he said. "We are committed to helping academic institutions develop engineers and technologists of the highest caliber for our communities, customers and business partners."

"UGS is also working with Washington University Medical School in improving orthopaedic recovery procedures with solid models," he added.

Rock images

Researcher completes state's first full survey

— from page 1

the eastern half of the state," Diaz-Granados said. "This is mainly because of the heavy activity by Native Americans around both the Mississippi and Missouri rivers, along with the influence from Cahokia across the Mississippi from what is now St. Louis."

Charles H. Faulkner, archaeology professor at the University of Tennessee, said in a review of Diaz-Granados' work: "This book should be a model for rock art research techniques in the Eastern Woodlands. Diaz-Granados and Duncan's work breaks new ground in style/motif analysis, methodology, and relationship to Native American mythology in studying these archaeological phenomena."

Archaeologists have typically stayed away from pictographs and petroglyphs, Diaz-Granados observed. "I think this is primarily because they are so hard to date," she said. "But these images are as much a part of the archaeological record as any other artifact."

Typically researchers have determined rock art dates by comparing symbols of objects to the actual artifacts that are found in excavations. Recent advances, by a group in the chemistry department at Texas A&M University, have enabled researchers to extract a small amount of pigment and determine the date with accelerator mass spectrometry. At this point the technique is used only for black pigments containing charcoal.

The Texas A&M researchers tested three of the Missouri sites. Their dates were determined to be around A.D. 1000, which coincides with dates based on the related diagnostic artifacts.

As part of her analysis of the data, Diaz-Granados classified designs into about 50 typical motifs and analyzed the locations and patterning of these designs throughout the state.

Among the most common images in Missouri are the bird, foot, serpent, quadrupeds, anthropomorphs and abstract designs. The three most typical motifs are the bird, the serpent and a variety of quadrupeds, such as deer and elk. Diaz-Granados said that this finding could be explained by the American Indian belief in a cosmos divided into three distinct but related worlds, the upper world (symbolized by the birds), the middle world (represented by the quadrupeds) and the lower world (the snakes).

Because rock art is primarily above ground, it is particularly susceptible to vandalism and weathering.

"The recording of these fragile prehistoric documents, as with any endangered site, should be a priority in each state's preservation efforts," Diaz-Granados said.

Diaz-Granados returned to school for a Ph.D. when her own children were grown. She noted that from 1989 to 1991 she and her four sons were all in college or graduate school at the same time. She first became interested in rock art in 1983, when, as a graduate student in archaeology, she was engaged by the Missouri Department of Conservation to write a report on the petroglyphs at the Rocky Hollow site in Monroe County.

"It was a lovely site, one of the top three in the state," Diaz-Granados said. "It is located in a small canyon with a river running through it and petroglyphs on both sides. When I saw the site I fell in love with rock art. I had no idea before I did my research project that Missouri had so many of these fascinating images. They are definitely worthy of study and preservation."



Jubilant Sarah Coffman, who enters the George Warren Brown School of Social Work's graduate program this fall, celebrates the completion of a five-day charity bike ride from St. Paul, Minn., to Chicago, Ill. Coffman, a resident of Edwardsville, Ill., was one of about 2,000 bicyclists who participated in Chicago AIDS Ride 5, an annual event designed to raise awareness and support for people living with HIV and AIDS. Coffman raised more than \$4,000 in donations from local residents and businesses. Her bike was donated by The Pedal Shop of Edwardsville.



JOE ANDERSON

Cookies and more Bessie Metcalfe (right), co-owner of Cookies by Design, discusses her product with Julie McCarthy of Accounting Services (left) and Carol Wibbenmeyer of Student Financial Services at the University's Supplier Diversity/Preferred Supplier Fair in Simon Hall July 12 — part of the University's effort to increase business opportunities for minority-owned enterprises as well as preferred supplier contractors. Thirty businesses participated in the two-day fair, which also was held at the medical school July 13.

Stroke

Lowering systolic pressure reduces incidence of stroke
— from page 3

systolic blood pressure goal: a decrease of 20 mm Hg to a systolic blood pressure below 160 mm Hg.

Perry and colleagues found that effectively lowering systolic blood pressure reduced the incidence of all strokes, both hemorrhagic and ischemic. There were significantly fewer ischemic strokes among those in the active treatment group than among those in the placebo group (85 vs. 132).

Due to the small number of hemorrhagic strokes that occurred during the study (9 vs. 19), the difference between treatment and placebo groups was not statistically significant.

The decrease in hemorrhagic strokes seemed to occur during the first year of treatment, while the decrease in ischemic strokes did not occur until the second year of treatment.

There was no significant difference in the percentage of fatal strokes. "Although there were 65 percent more fatal strokes among placebo participants than among active treatment participants, in both groups just under 10 percent of the strokes that did occur were fatal," Perry said.

Perry noted that while the two groups' nursing home admissions and Activities of Daily Living (ADL) scores were similar, the consistently fewer days of reduced activity, including days in bed, suggests that participants in the active treatment group were less disabled when they had a stroke than were those in the placebo group.

Kornfeld

Appointed to new Farrell Professorship
— from page 1

Medicine in this manner. It is also a pleasure to have this distinction bestowed on Stuart Kornfeld, one of the world's great scientists."

David C. Farrell is the former chairman and chief executive officer of The May Department Stores Co. A member of the University's Board of Trustees, Farrell also has been active on the boards of the local council of Boy Scouts of America, the Saint Louis Community Foundation, The Saint Louis Art Museum and other organizations. He chaired campaign efforts for the United Way of Greater St. Louis, the Salvation Army and The Arts & Education Council of St. Louis.

Betty Farrell is a dedicated community volunteer. Among other activities, she helped lead a fund-raising effort for an archaeology project at the University, has been a board member of the Sheldon Arts Foundation and has served on a commission for the Missouri Botanical Garden.

Kornfeld co-directs the

Division of Hematology and is a professor of medicine and of biochemistry and molecular biophysics. He has made groundbreaking discoveries about how sugar chains direct protein movements within cells. Sugar chains can serve as antennae-like attachments that allow proteins to be routed to their correct destinations the way an address determines where mail is sent.

In his early research, Kornfeld uncovered the structure of many sugar chains and the steps involved in forming sugar chains that are linked to the amino acid asparagine. He conducted much of this work in collaboration with his wife, Rosalind H. Kornfeld, Ph.D., professor of medicine and of biochemistry and molecular biophysics.

Stuart Kornfeld is best known for discovering how lysosomal enzymes are routed to lysosomes, cellular structures that serve as garbage disposals. He identified two enzymes that add a specific sugar marker onto lysosomal enzymes. And he determined how the two recognize the enzymes they need to label.

In addition, he identified one of the two receptors that recognize the sugar marker on lysosomal enzymes and determined where in the cell this interaction

occurs. He also delineated the pathway the receptors take to get lysosomal enzymes on the appropriate molecular conveyor belt to reach lysosomes.

Kornfeld has described how lysosomal enzymes that fail to be recognized inside cells can be rerouted to lysosomes by additional cell-surface receptors. More recently, he has identified other molecular players involved in routing lysosomal enzymes.

Kornfeld has received numerous honors, including the Passano Award in 1991 and the Karl Meyer Award from the Society of Glycobiology in 1999. An author or co-author of more than 200 scientific articles, he is a member of honorary societies including the National Academy of Sciences, the Institute of Medicine, the American Academy of Arts and Sciences and the Association of American Physicians. He also has served on numerous editorial and advisory boards.

Kornfeld received a medical degree from the University in 1962 and joined the faculty here four years later. He became a professor of medicine in 1972 and of biochemistry in 1976, the same year he began co-directing the hematology division. Kornfeld also directed the Medical Scientist Training Program from 1991 to 1997.

Guze

Pioneered medical model of psychiatric illness
— from page 1

leagues finally received validation of their work by the psychiatric community when they helped create the American Psychiatric Association's DSM-III (Diagnostic and Statistical Manual of Mental Disorders). The manual immediately became a best seller and is still in use today. With colleagues, he also wrote a textbook for followers of the Washington University approach. "Psychiatric Diagnosis" was published in 1974 and is considered a classic.

In addition to his scientific accomplishments, Guze led the school as vice chancellor for medical affairs during a time of rapid expansion and changes in medical care and medical research. He was appointed vice chancellor and president of the Washington University Medical Center in 1971, positions he held until 1989. He was head of the Department of Psychiatry from 1975 to 1989 and again from 1993 to 1997. In all, he served on the faculty for almost 50 years. He

also served as psychiatrist-in-chief at Barnes-Jewish and St. Louis Children's hospitals.

Guze, considered an outstanding teacher, trained hundreds of psychiatrists who now are leaders in their respective institutions. He and his wife, Joy, established the Samuel B. Guze Professorship in Psychiatry in 1998. To Guze's delight, the first holder of the professorship is his former student and current head of the psychiatry department, Charles F. Zorumski, M.D.

"Sam Guze was one of the greatest superstars of Washington University, a brilliant scientist, an outstanding physician, a wise and trusted leader, an intellectual of breadth and depth, a man of strong character and a wonderful friend," said William H. Danforth, M.D., professor of medicine, chancellor emeritus of the University and vice chair of its Board of Trustees. "He has left his mark on Washington University and on all of us, his many colleagues."

Guze was born in New York City Oct. 18, 1923. He attended the City College of New York, Washington University and its School of Medicine, receiving his medical degree in 1945.

"I've lost my best friend, and psychiatry and the medical school have lost one of the greatest," said M. Kenton King, M.D., professor emeritus and former dean of the medical school.

Guze published more than 200 scientific papers and several books. He also was the recipient of numerous awards. His most recent

honor was received in January when he was awarded the Thomas William Salmon Medal from the New York Academy of Medicine.

Other awards include the Sarnat Prize in Mental Health from the Institute of Medicine, the Samuel Hamilton Medal and the Paul Hoch Award Medal from the American Psychopathological Association, the Distinguished Public Service Award from the Department of Health and Human Services and an Alumni/Faculty Award from the School of Medicine.

Guze was a member of the Institute of Medicine, Alpha Omega Alpha, Sigma Xi and the Psychiatric Research Society, among other groups, and a fellow of the American Psychiatric Association, American College of Physicians, American Association for the Advancement of Science and Royal College of Psychiatrists.

Donations to honor Guze may be made to the Samuel B. Guze Research Fund in the Department of Psychiatry at the School of Medicine, Campus Box 8134, 660 S. Euclid Ave., St. Louis, MO 63110. The fund has been established to support young investigators' research. Guze's body was donated to the medical school for research and teaching, in accordance with his wishes.

A memorial service will be held at 4 p.m. Sept. 10 in Graham Chapel, followed by a reception.

He is survived by his wife of 54 years, Joy Campbell Guze; a son, Jonathan D. Guze of Durham, N.C.; and a daughter, Jeremy Ann Opitz of Danbury, N.H.; five grandchildren; colleagues and friends.

Employment

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

Hilltop Campus

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

Mechanic (bargaining unit employee) 990271

Director of Development/Executive Faculty Liaison 990280

Mechanic (bargaining unit employee) 990342

Science/Engineering Librarian 990364

Regional Director of Development 000057

Chemistry/Earth Sciences Libraries Assistant 000099

Administrative Coordinator 000160

Research Assistant 000191

Lab Technician 000208

Sr. Prospect Researcher 000212

Department Secretary 000222

Systems Manager 000239

Lab Technician III 000241

Department Secretary 000251

Associate Director of Capital Projects 000253

Research Technician 000256

Watchman (licensed) 000262

Deputized Police Officer 000272

Manager of Systems Support and Development 000277

Administrative Assistant 000278

Registrar 000292

Sr. Research Assistant/Jr. Research Associate 000297

Research Technician 000300

Human Subject Coordinator 000310

Senior PC Support Specialist 000314

Government Grants Specialist II 000320

Department Secretary 000323

Director 000329

Coordinator, Alumni and Student Marketing and Relations 000331

Audio/Visual Coordinator 000339

Research Assistant 000341

Reference/Subject Librarian for Art and Architecture 000344

Director of MBA Admissions and Financial Aid 000347

Associate Director of Parent Programs 000352

Administrative Assistant 000356

Administrative Assistant 000357

Senior Internal Auditor (part time) 000361

Lab Technician III 000363

Director of Employee Relations 000364

Switchboard Operator (part time) 000365

Administrative Secretary 000366

Director of Alumni and Constituent Relations 000371

Library Services Assistant 000372

General Services Assistant 000377

Unix Systems Administrator 000379

Student Records Office Assistant (part time) 000380

Events and Education Coordinator 000381

Government Grants Specialist 000382

Shelving Assistant 010001

School Accountant 010002

Records/Property Clerk 010003

Regional Director of Development 010004

External Reporting Accountant 010006

Lab Manager, Arts & Sciences Computing Center 010008

Scene Shop Supervisor 010009

Student Services and Programs Coordinator 010010

Proposal/Profile Senior Specialist 010012

Word Processing Operator 010013

Administrative Aide 010014

Operations Manager 010015

Department Secretary 010016

Retention and Academic Advisor 010017

Administrative Assistant/Receptionist 010018

Special Collections Assistant 010019

LAN Engineer 010020

Departmental Accountant 010021

Director of Communications 010022

Research Assistant 010023

Senior Accountant 010024

Administrative Coordinator 010025

Manager, Business Development 010026

Information Technology Assistant 010028

Data Manager and Analyst 010030

Administrative Secretary 010031

Instructional Technology Specialist 010033

Technical Director 010034

Facility and Services Coordinator 010035

Administrative Assistant II 010036

Administrative Assistant I 010037

Academic and Financial Analyst 010038

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.

RN Staff Nurse 002027

Physician Assistant (accredited) 010037

Campus Watch

The following incidents were reported to University Police from **July 10 — Aug. 4**. 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.

July 17

8:09 a.m. — A flatbed trailer containing a 500-gallon water tank and a gas pump were stolen from a construction site at Brookings Drive and Skinker Boulevard. The items were valued at \$3,600.

July 29

11:04 p.m. — Police investigating a suspicious persons report in Eliot Residence Hall arrested a non-student after a foot pursuit. The man was charged with possession of a controlled substance, possession of drug

paraphernalia, receiving stolen property and trespassing. Further investigation led to the arrest of a second non-student the following day in University City. The second man was charged with burglary and stealing. Police are still investigating, but the two are allegedly responsible for numerous thefts and burglaries reported in Eliot Residence Hall.

University Police also responded to 13 additional reports of theft, four burglary reports, three public disturbances, one motor vehicle theft and one report each of assault and a suspicious person.

Notables

Ruwitch named health and wellness coordinator

Melissa Early Ruwitch has been named coordinator of health promotion and wellness, according to Karen Levin Coburn, assistant vice chancellor for students and associate dean for the freshman transition. Ruwitch replaces MiMi Weiss, who left the University in May.

Ruwitch oversees an office committed to furthering a community that supports every student's optimum well-being, including providing access to programs, services and resources designed to enhance their personal health and wellness. Ruwitch will coordinate efforts throughout the campus to promote healthy living environments, with the goal of developing



Ruwitch: Ensuring students' well-being

lifelong habits that help students achieve their fullest potential.

As a function of this, she will work with a coalition of students, faculty and administrators to implement the vision recently presented to the National Council for the Undergraduate Experience. Among the proposals: health insurance for all students, expanded recreational facilities and programs, a Wellness Resource Center, more options for nutritious food and expanded efforts to reduce alcohol abuse.

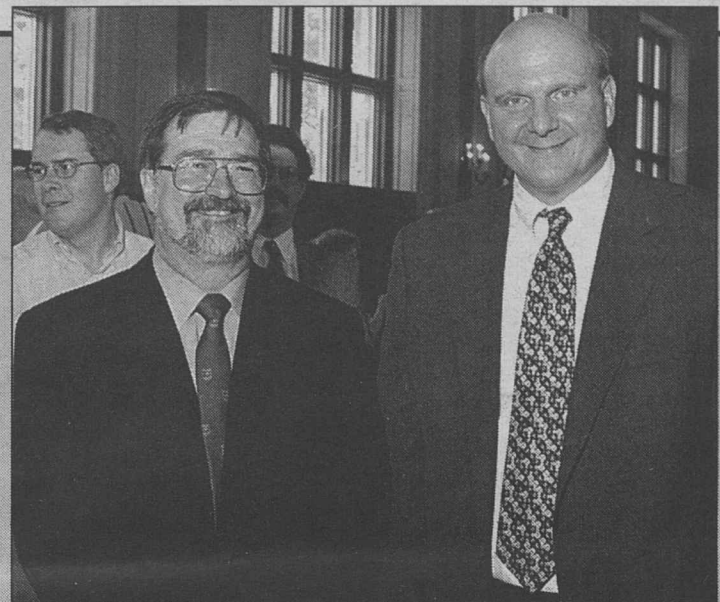
She will work with students and faculty to design a campaign to reduce high-risk drinking among students. Ruwitch also will manage a health and wellness Web site and edit a newsletter which will be distributed on campus.

Ruwitch returns to the University after taking time off to nurture her three-year-old twins. Previously, she had served as assistant director of the

University's Alumni and Parents Admission Program from 1994 to 1997. There, she managed volunteers in the program's network, which recruits and enrolls outstanding students.

"I am delighted that Melissa has returned to Washington University in this important role," Coburn said. "She is full of energy and has superb organizational skills. She's already out there working with students, resident advisers, residential college directors, administrators and faculty to promote health and wellness on our campus."

Ruwitch earned a bachelor's degree in English, graduating with distinction in 1989 from Colby College in Waterville, Maine. At Colby, she had a number of leadership roles, including founder of the group Colby Against Sexual Assault. She has also been active in the St. Louis community as a volunteer on health and wellness issues.



High honors Steve Ballmer (right), president and chief executive officer of Microsoft Corp., received the School of Engineering and Applied Science's Excellence in Engineering and Technology Award July 13. More than 900 people attended the event in Graham Chapel. The award honors exemplary leadership in transforming innovative ideas in engineering into new products and technologies. "The School of Engineering and Applied Science long has appreciated accomplishments that advance technology and enhance the quality of life," said Dean Christopher I. Byrnes, Ph.D. (left), in presenting the award, noting Ballmer's leadership and the company's industry-standard status.

Robyn Neuhalfen appointed APAP director

Robyn Neuhalfen has been appointed director of the Alumni and Parents Admission Program (APAP), according to David T. Blasingame, vice chancellor of Alumni and Development, and John A. Berg, associate vice chancellor for undergraduate admissions.

Neuhalfen, who had served as interim director of the APAP since late June, was senior assistant director of the program for four years. She will manage the program's four-person staff and the network of about 2,300 alumni and parents in 66 communities across the United States and in six foreign countries. The program allows more than 4,500 applicants to be interviewed each year by alumni in their home communities and also connects parents of applicants with parents of current students to act as resources.

Neuhalfen also will continue to work closely with national chairperson Sally Silvers, a 1969 alumna, to set goals and priorities, and oversee the annual chair conference.

"We are delighted that Robyn will be succeeding Elizabeth Robey," said Blasingame. "She has been a key person in the success of APAP, and she brings great enthusiasm and experience to her new responsibilities."

In addition to her promotion, Neuhalfen will continue to serve as senior assistant director of undergraduate admissions — a position she has held since



Neuhalfen: New admissions post

coming to the University in 1996.

"We are extremely pleased that Robyn is assuming the APAP role permanently. She has been instrumental in building the program, which is highly successful in recruiting students," Berg said. "She is very dedicated and has an unbounded energy. She never stops until the job is complete."

Neuhalfen previously worked as a public relations specialist for Fontbonne College for two years after earning a bachelor's degree from Webster University in 1993. She currently serves on the executive board nominating committee of the Community Service Public Relations Council and as a member and conference presenter for the Missouri Association for College Admission Counseling. She also is a member of Metropolis St. Louis and volunteers for the Webster University Alumni Association.

Seligman to chair commission's market advisory committee

Joel Seligman, J.D., dean of the School of Law and the Ethan A. H. Shepley University Professor, has been named chair of the Securities and Exchange Commission's (SEC) new Advisory Committee on Market Information. The federal advisory committee will assist the SEC in evaluating issues related to the public availability of market information in the equities and options markets.



Seligman: Expert on securities law

"The Securities and Exchange Commission will benefit greatly from the expertise of this broad-based advisory committee, and I am grateful that such an eminent scholar as Joel Seligman has agreed to lead this important initiative," said SEC Chairman Arthur Levitt.

The committee will explore a broad range of issues, including methods of consolidating market

information and the benefits of price transparency — the availability to the public of accurate quotation and transaction information. The committee also will address issues related to electronic quote generation and decimalization; disseminating and consolidating information from multiple markets; and governance structures for joint market information plans.

"I look forward to the challenge that Chairman Levitt has presented us," said Seligman, co-author with the late Louis Loss of the 11-volume treatise "Securities Regulation" and a nationally renowned expert on securities law.

"So much has changed in this area of the securities industry: new ways of disseminating quote and last sale information; alternative trading systems; on-line trading; the increased potential of wireless communication; dramatic increases in the volume of trading; and other fundamental factors," Seligman continued. "The time seems appropriate for a fresh look at the securities industry's consolidated tape and consolidated quotation systems."

For the Record

Of note

Rajiv Bhatnagar, M.D., Ph.D., recently was awarded the 2000 Dr. Phillip Needleman Pharmacology Prize by the Division of Biology and Biomedical Sciences (DBBS). The prize is given to a graduating student who has demonstrated outstanding achievements in pharmacology. The DBBS also bestowed the 2000 Jakschik Award on **Laurie O'Brien**. The Jakschik award is presented to an outstanding female graduate student, in her final year of doctoral research, whose work has focused on the general area of metabolic regulation. ...

Katrina Maluf, a graduate student in the Program in Physical Therapy, recently received the Promotion of Doctoral Studies Level 1 award from the Foundation of Physical Therapy. The \$7,500 award is given to post-professional doctoral students who show potential for scholarly productivity, clearly outlined career goals and an intent to promote the profession of physical therapy. In addition, **Catherine Lang**, a physical therapy graduate student, received the Mary Lou Barnes "Adopt-a-Doc" award from the Neurology Section of the American Physical Therapy Association. The \$10,000 award is given to an outstanding post-professional

doctoral student who has shown scholarly productivity and potential to contribute to research in neurological physical therapy. Lang also received a \$15,000 Promotion of Doctoral Studies Level II award from the Foundation for Physical Therapy.

On assignment

John Drobak, J.D., professor of law, helped run the third annual Conference of the International Society for New Institutional Economics at the World Bank in Washington, D.C. He also was a discussant of four papers presented at a panel on "Law and Disorder." At the society's annual meeting, Drobak was re-elected secretary and a member of the Executive Committee of the Board of Directors.

Speaking of

John C. Morris, M.D., the Harvey A. and Dorismae Hacker Friedman Professor of Neurology and co-director of the Alzheimer's Disease Research Center, recently participated as an invited speaker in the sixth Conference of Neurodegenerative Disorders: Common Molecular Mechanisms

in Tobago, West Indies. Morris presented to an international audience of 50 neuroscientists on "Lessons from Clinicopathologic Studies of Healthy Aging and Very Mild Alzheimer's Disease."

David M. Holtzman, M.D., assistant professor of molecular biology and pharmacology and of neurology, also participated in the conference, presenting "Apolipoprotein-E effects on Amyloid Deposition in Transgenic Mouse Models of Alzheimer's Disease." ...

Angela White-Randolph, an MBA '01 candidate in the John M. Olin School of Business, recently presented "What the Consortium Means to Me," her testimonial on behalf of the Consortium for Graduate Study in Management's class of 2001, at a kickoff breakfast held in Chicago. The consortium, comprised of Washington University and 11 other major universities throughout the United States and funded by these universities, corporations and foundations, offers full merit-based scholarships to minority students in MBA programs. Since the organization was founded by a Washington University professor, the late Sterling H. Schoen, in 1966, it has brought more than 3,000 minority men and women into the ranks of American business management.

Alan Templeton honored for innovative science research

Alan R. Templeton, Ph.D., professor of biology, has been named as one of the recipients of the first-ever Burroughs Wellcome Innovation Award in Functional Genomics.

Joining a field of 11 prominent scientists honored for their innovative research nationwide, Templeton was awarded a four-year \$200,000 grant by the Burroughs Wellcome Fund, a private foundation dedicated to supporting new research and advancements in medical science.

The Burroughs Wellcome Fund developed the novel award in connection with recent breakthrough advancements and research on genomic mapping and sequencing. The Innovation Award was designed to bring new ideas into the field of gene research and to help speed the sequencing of current genomic data.

Templeton received the grant for his work on "Cladistic analyses of epistasis among candidate genes

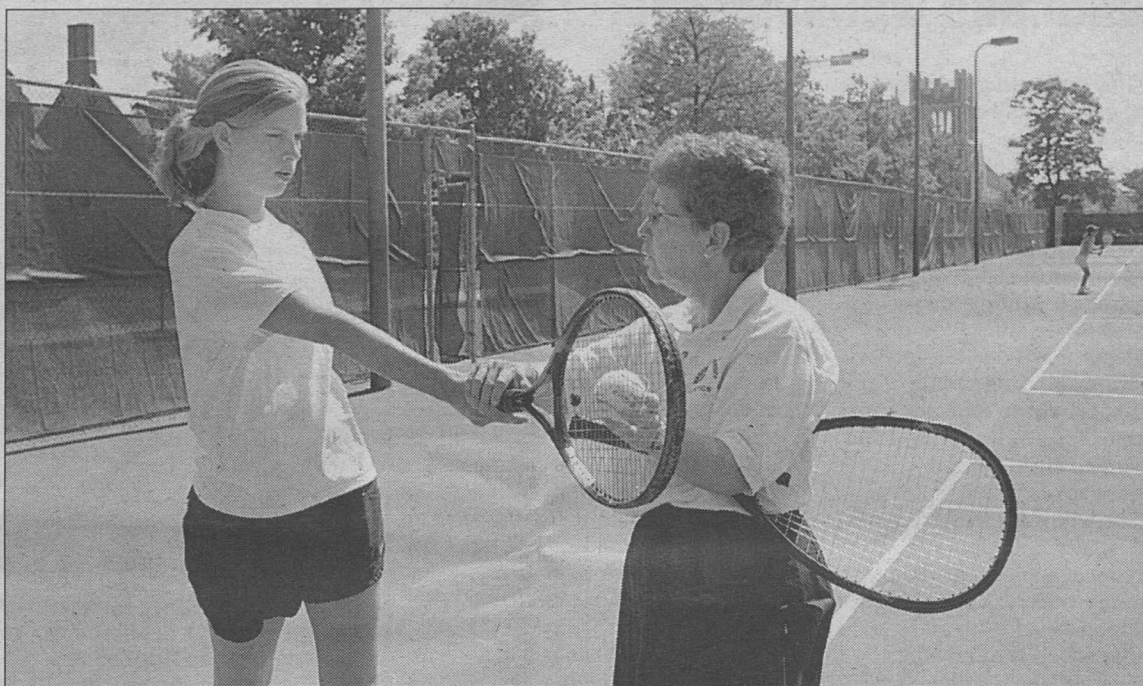
influencing common disease." This represents a three-pronged approach to develop a computational method, based on a family-tree structure, that analyzes the roles of gene interactions in complex diseases, such as coronary artery disease.

Templeton, who joined the faculty in 1977, is a renowned population and evolutionary biologist who has analyzed the genomes of many different species to better understand their evolution and their survival. Since 1984, he has been the head of the Evolutionary and Population Biology Program in the University's Division of Biological Sciences.



Templeton: Honored for genomics work

Washington People



Under Lynn Imergoot, shown here giving student Lauren Martz pointers on her grip, the University's women's tennis team has been ranked among the best in the country.

Passionate coach garners many honors

Lynn Imergoot is staunch advocate for women athletes

By DEB ARONSON

Brash. Educated. Passionate. These adjectives — which Lynn Stockman Imergoot uses to describe the late Bella Abzug, one of her heroes — would certainly fit her, too. Even after living in the Midwest for close to 30 years, Imergoot is the first to say she hasn't lost a bit of her New York accent or her competitive streak. But that competitive streak is tempered by her conviction that it is "important to honor those people who came before you."

In her 28 years at Washington University, Imergoot, assistant athletic director and women's tennis coach, has earned her share of honors. She is currently the winningest coach on the campus with 356 victories, and her teams have consistently been ranked among the best in the country. In 1997, the women's tennis team made it to the NCAA Division III National Tennis Championship for the first time ever.

Imergoot has received numerous awards, including women's tennis coach of the year from the University Athletic Association in 1989, 1990, 1991 and 1995, the Missouri Women in Sports Leadership Award and the Central District Scholar Award from the American Alliance for Health, Physical Education, Recreation and

Dance (AAHPERD). She also was inducted into the St. Louis Jewish Sports Hall of Fame in 1998.

"I've lived in St. Louis for more than half my life," she mused. "I am proud to be a model for other Jewish women. And it was a good feeling to be the one female among a bunch of guys to get the award."

Imergoot is a staunch advocate for women in athletics.

"Too often we forget how things were before our time," Imergoot said, explaining

her efforts to honor women athletes from many years ago. "My players — all of whom were born in the 1980s — don't know about Billie Jean King and her match against Bobby Riggs, much less Wilma Rudolph and other outstanding female athletes who blazed the trail."

Recognition

Partly because of this, Imergoot has worked hard to generate recognition for women athletes. She led the effort to establish the University's endowed A. Gwendolyn Drew Award in 1985. The award honors Drew — a physical education teacher and the first female full professor at Washington University — and recognizes exceptional academic achievement by a male and a female senior varsity athlete.

Imergoot also nominated the late Helen Manley, a leader in the field of health and physical education, for an honorary doctorate from the University, which Manley received in 1986.

"The history and development of women in sports is Lynn's passion," noted John M. Schael, athletic director. "And that passion goes beyond the Hilltop Campus and includes changes taking place at the national level."

Imergoot attended the Bronx High School of Science, one of the most competitive high schools in the country. She played many sports, though her passion was handball. "I loved handball, and I'd play against the boys every chance I got," she recalled. "Until I was 14 or 15, that is, and the boys hit puberty. Then they were just too strong, and I hated to lose."

At Science she met her first role model, Fran Feuerstein Moskowitz, a graduate of the school herself and Imergoot's gym teacher.

"In the era I grew up in, girls became either nurses, secretaries or teachers," Imergoot said. "After meeting Fran, I knew I wanted to be a New York City high school gym teacher."

At Science she switched to tennis from handball after Moskowitz introduced her to an indoor version. Imergoot continued to play tennis in college on the varsity team. In 1970, after receiving a master's degree from the University of Illinois, Imergoot became a physical education teacher and coach at White Plains (New York) High School. In 1972 she saw an advertisement for the Washington University position.

"I had cousins in St. Louis I

had become friendly with, and I thought, here's a chance to take a free trip out to see them!" she remembered with a laugh.

By the end of the visit, Imergoot had accepted the position and met Michael Imergoot, who was a graduate assistant in the physical education department and a baseball player. They were married for 12 years and have two children, Douglas and Jennifer. Imergoot also recently became a grandmother when her daughter gave birth in June to Tamia Alexis Harris.

"I delayed going to camp [Imergoot has worked at various summer camps for 31 years] for the first time in my life to be here for her birth," said Imergoot, who planned both her own pregnancies around her coaching and camp schedules.

A good fit

The University was a good fit for her. "Washington University is an ideal setting for Lynn," said friend and colleague Kathleen Haywood, associate dean of education at the University of Missouri, St. Louis. "She really appreciates the value of the education the students are getting and would never do anything to compromise their studies."

Said Imergoot: "I have loved being at Washington University all these years. I have loved being part of a truly top-notch academic community."

One change Imergoot regrets is that in 1978 her position (and all those in the athletics department) were recategorized from academic to staff.

"I truly believe faculty are the most important people here," she said. "And I think it's a shame that athletic department staff don't have academic status any more. You can pick up important life-long lessons playing tennis. Yes, you want to win your matches, but sometimes the most important lessons learned are not how to hit a forehand but how to strive to be the best you can be, how to manage your time, how to get along with people and be part of a team, and how to rebound after being down in a match to come out

victorious. I hate to be viewed as a nonacademic person on an academic campus."

In fact, much of what Imergoot does, beyond coaching tennis, is scholarly. She co-edits a journal of the Missouri Association of Health and Physical Education Recreation and Dance and has written articles for a wide variety of professional journals, as well as the St. Louis Post-Dispatch and the Jewish Light.

Haywood noted that when Imergoot received the AAHPERD Central District Scholar Award, it was the first time someone was honored who wasn't required to do scholarly work as part of her job.

"That is the mark of a true scholar," said Haywood, "that Lynn would do all this scholarship on an essentially volunteer basis. Lynn is the kind of person you'd want on your side. She has the energy of two people. She's very intelligent and is passionate about many causes, particularly those relating to the importance of equal opportunities for women in sports."

Imergoot is a masterful fundraiser, having raised more than \$48,000 over nine years for the tennis team. She also has worked for 25 years at Camp Starlight in Pennsylvania. "I don't think I'd be happy just coaching tennis," said Imergoot, who also is working toward a doctorate at UMSL in physical education and leadership.

Imergoot claims to have become a rebel only as she's gotten older, but she relishes telling a story of voting for the late Bella Abzug in 1972.

"I absolutely couldn't vote for Nixon or McGovern, so I stood in

"The history and development of women in sports is Lynn's passion. And that passion goes beyond the Hilltop Campus and includes changes taking place at the national level."

JOHN M. SCHAELE

line over two hours to get a write-in ballot. I exercised my right to vote and was proud of it."

Imergoot went on to talk about meeting Abzug years later at a blackjack table in San Juan, Puerto Rico, and telling her about her vote. Abzug thanked her and then joined her in a game of blackjack. In a memorial tribute to Abzug, Imergoot wrote: "Abzug paved the way for those of us who consider ourselves 'feminists.' She never did have an easy go at things, and her personality could certainly be considered abrasive, but she spoke up for what she believed in and was always true to her beliefs. If you didn't agree with her views, that was okay, but you always knew where she stood on issues."

The same could be said of Imergoot.

Lynn Stockman Imergoot

Born and raised in New York

Family Daughter, Jennifer, 19, sophomore at the University of Missouri, St. Louis; son, Douglas, 22, graduated from Indiana University; granddaughter, Tamia Alexis Harris

Education B.A., Lehman (Hunter) College, New York; M.S., University of Illinois, in physical education; certificate in writing for the professional, Washington University; currently a doctoral candidate at the University of Missouri, St. Louis

Hobbies "My work is my play."



Among them, Lynn Imergoot (left), Shelly Spiegelman (center) and Susie Silverman have put in 89 years as staff at Camp Starlight in Pennsylvania. Imergoot is the camp's program director.