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Record

WASHINGTON
UNIVERSITY
IN ST. LOUIS

Vol. 16 No. 35 Aug. 6, 1992



Alan R. Templeton, Ph.D., professor of biology, and graduate student Marguerite Butler examine autoradiographs of the St. Louis zoo population of Speke's gazelles in Templeton's laboratory. The autoradiographs show genetic variations among the inbred population as well as diversity brought to the herd with the addition of some animals from Somalia.

Saving endangered species

Genetics technology now at core of conservation biology

Conservation biology conjures up the timeworn image of adventurers in pith helmets combing wilderness areas as they search for endangered species to capture and bring back to zoos.

While conservation biologists still are out "beating the bush," the pith helmet set has changed drastically in the past decade, says Alan R. Templeton, Ph.D., Washington University biology professor. Templeton says advances in genetic techniques have changed the working style of the Marlin Perkinses of the 1990s as they preserve and monitor species.

Templeton, who has helped preserve the endangered Speke's gazelle and the declining populations of the Mexican wolf, explains the impact of genetics on conservation biology in "Genetics and Conservation Biology," a chapter in the recently published book *Species Conservation: A Population-Biological Approach*, edited by A. Seitz and V. Loeschke, Birkhauser Verlag publishing company.

"Ecology is the biological science most commonly linked in the public mind to conservation issues," says Templeton. "But in an age of rapid species extinction, genetics is becoming the conservation biologist's indispensable tool, and it is also changing conservation management concepts."

Genetics is being used as a "fingerprinting" technique to track down poachers; a means of identifying species; a way to detect hybridization of species; and a tool to

manage both captive and natural populations, Templeton says. Genetics has become more integral to conservation biology, he adds, thanks to the development of techniques such as polymerase chain reaction (PCR), which allows biologists in the field to collect minute samples of DNA in various conditions and examine them later, without the worry of refrigerating the samples while they travel.

"As recently as six years ago, collecting genetic samples was difficult at best and at times impossible because you needed to take large samples — either blood or fresh, intact tissue — then rush them off to a laboratory for analysis," Templeton says. "Today, PCR lets you examine small pieces of sometimes very old, degraded DNA without the need of refrigeration, and it also gives researchers more copies of DNA much more rapidly than previous techniques."

A prime example of "genetic sleuthing" in biological conservation is the work of Templeton's collaborators: John Patton, Ph.D., formerly a Washington University research associate; and Nicholas Georgiadis, Ph.D., research associate. Georgiadis also is a researcher with the World Wildlife Fund. Beginning in 1989, the two developed a genetic data base of elephant DNA from 100 confiscated poached African elephant tusks. Their overall goal was to halt the illegal ivory trade, a practice so severe that it is threatening the existence of African

elephants. They believed they could track the tusks' point of origin by gaining genetic clues from the elephant DNA. The clues are genetic "fingerprints" that can tell the scientists if the elephant was a savanna or forest form, what line of female gave birth to it and from what part of the continent the elephant came.

Patton and Georgiadis have been able to establish geographical distribution of some elephants through genetic markers they have found from the DNA of the tusks. "The initial results of this work strongly indicate that it should be possible to identify the country of origin of a tusk based on genetic screening," says Templeton.

Genetic diversity

The increased reliance upon genetics in species preservation has brought the issue of genetic diversity to the forefront of conservation managers — such as zookeepers and reserve managers — as well as the general public, Templeton says.

"During Ronald Reagan's first campaign for president he supposedly said, 'Once you've seen one redwood, you've seen them all,'" Templeton relates. "That is an attitude we still see today. People tend to think if you save one piece of redwood forest or one part of Alaska tundra, you don't need to preserve any more. But species thrive on genetic diversity — the raw material of evolution. Let's say humans were going to be wiped out by some disease and some concerned aliens could only repopulate the world with two individuals. So, they pick Ronald and Nancy Reagan. Would they represent the human species?"

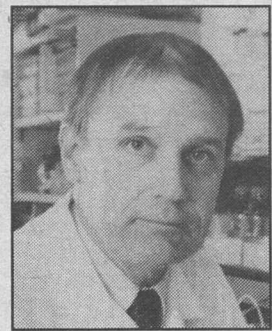
"The same concept is as true with elephants, the Speke's gazelle and Missouri's collared lizards — all threatened or endangered — as it is with hundreds of plants worldwide that face extinction," adds Templeton, who, in 1979, faced the same situation as the hypothetical aliens repopulating the world with the Reagans. At the time, Templeton and Bruce Read, St. Louis

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John Atkinson named internal medicine chair

John Atkinson, M.D., has been named chairman of the Department of Internal Medicine at the School of Medicine, effective Oct. 1.

Atkinson replaces David M. Kipnis, M.D., professor of medicine, who has held the position since 1973. Kipnis has been appointed Distinguished University Professor of Medicine and will divide his activities between research in diabetes mellitus, undertaking special projects assigned by the dean and increased involvement in corporate and foundation interactions with the medical school.



John Atkinson

"The Department of Medicine at Washington University has a long tradition of outstanding leaders, most recently David M. Kipnis," said William A. Peck, M.D., vice chancellor for medical affairs and dean of the School of Medicine. "Hence, the department has become one of the best in the nation, recognized for the scientific, educational and clinical contributions of its superb faculty. John Atkinson has the talent to build on that tradition well into the 21st century."

"He is a world-class investigator, a renowned teacher and a superb clinician who has the respect and admiration of students, house staff, trainees and faculty."

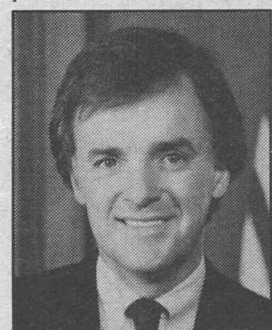
Atkinson, a professor of medicine and molecular microbiology, will leave his post as director of the Division of Rheumatology. Louis Simchowitz, M.D., professor of medicine, will serve as the division's interim director. Atkinson will continue his re-

Continued on page 2

Sen. Robert Kerrey opens Assembly Series

Sen. Robert Kerrey, D-Neb., will give the convocation address at 11 a.m. Aug. 26 in Graham Chapel. His lecture, which opens the fall Assembly Series, is free and open to the public.

Kerrey campaigned for the Democratic presidential nomination earlier this year.



Robert Kerrey

He serves on the agriculture and appropriations committees and has been actively involved in health care issues. Prior to his election to the U.S. Senate in 1988, he was a millionaire restaurateur and health club owner and served as governor of his state.

A graduate of the University of Nebraska and the Naval Officer Candidate School, he volunteered for the U.S. Navy SEALs (Sea, Air and Land) during the Vietnam War. In addition to receiving the Congressional Medal of Honor for valor, he was decorated with a Bronze Star and a Purple Heart for his service. He has taught a class on Vietnam at the University of California, Santa Barbara, and government classes in Omaha.

For more information, call 935-4620.

In This Issue...

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News Analysis: Pain management is a key factor in right-to-die issue, says Robert A. Swarm Page 7

Medical Update

Cloninger receives Isaacson Award for work on genetics and alcoholism

This year's James B. Isaacson Memorial Award went to C. Robert Cloninger, M.D., Wallace Renard Professor and head of the Department of Psychiatry at the School of Medicine.

He shares the award with Michael Bohman of Umea, Sweden. The two have worked together on adoption studies in Scandinavia and are being honored for their work on genetic risk factors for alcoholism. They share the fourth Isaacson award, which was created in 1986 to honor scientists whose research contributions are crucial to basic or clinical medical advances in alcoholism and drug abuse.

In 1981 Cloninger and Bohman's adoption studies identified two types of alcoholism. In type 1, the more prevalent, drinking begins in early adulthood, causes medical problems in later life, and is caused by both genetic and environmental factors. In type 2, which usually occurs in men and often in criminals, genetic tendencies are the primary cause.

Cloninger, also a professor of genetics, has investigated the genetic epidemiology of alcoholism and several other psychiatric illnesses, including schizophrenia and mood disorders. In researching the genetic and environmental causes of the various disorders, he has studied samples from the general populations of several countries including the United States, Commonwealth of Independent States, Italy, Japan, and the Scandinavian countries.

Cloninger recently was presented with the Mortimer Goodman Award by the Alliance for the Mentally Ill of St. Louis. He was cited in particular for his commitment to service in the public sector. Cloninger is a member of the Missouri Mental Health Commission and has worked on behalf of Malcolm Bliss Hospital in St. Louis, where he is a consulting psychiatrist. He is psychiatrist-in-chief at Barnes Hospital and is a staff physician at Jewish and St. Louis Children's hospitals at the Washington University Medical Center.

Goldberg chosen for Culpeper scholarship

Daniel E. Goldberg, M.D., Ph.D., assistant professor of medicine and molecular microbiology, is one of three scientists chosen to receive a Charles E. Culpeper Foundation Scholarship in Medical Science for 1992.

The foundation's scientific advisory committee chose the scholars from among more than 50 applicants nominated by their institutions. In addition to Goldberg, Peter M. Glazer, of the Yale University School of Medicine, and Keith Mostov, of the University of California, San Francisco, were chosen as Culpeper scholars.



Daniel E. Goldberg

The award provides Goldberg with \$100,000 per year for three years to fund his research on alternative drug therapy to combat malaria, a parasitic illness that kills two million people annually.

Funding from the Culpeper Foundation will allow Goldberg to further define the

metabolic processes critical to the survival of malaria parasites. The information is crucial for his attempts to engineer novel molecules that starve the parasite by shutting off its energy pipeline. The compounds essentially deceive the parasites into "believing" they are destroying hemoglobin, the oxygen-ferrying component of red blood cells and the parasite's prime source of energy. The goal of the work is to provide a much-needed alternative to the current inadequate malaria therapy, Goldberg says.

Although drugs are available to protect against malaria, the parasite has devised cunning ways to become resistant to the most effective drugs. Consequently, there is an urgent need for better anti-malarial therapy.

The Charles E. Culpeper Foundation Scholarships in Medical Science program was established in 1987 as an extension of the foundation's ongoing commitment to medical science. Since the scholarship program began, 15 investigators from medical schools throughout the United States have received the award.

The Culpeper Foundation was established under the will of the late Charles E. Culpeper, a pioneer in the bottling and marketing of Coca-Cola.

Atkinson named chair — from page 1

search on the structure, function and genetics of the complement system, a group of proteins of the immune system. Atkinson's research has played a key role in defining how the complement system is activated, and in looking for ways to control the damage complement proteins sometimes cause by attacking the body's own cells.

Atkinson joined the University faculty as an assistant professor of medicine and head of the rheumatology division in 1976. He became a full professor in 1984. Since 1976 he has been a senior investigator for the Howard Hughes Medical Institute which supports scientists at academic medical centers and universities throughout the United States. Atkinson serves on the editorial boards of four medical journals, among them the Journal of Immunology and the Annals of Internal Medicine.

In November 1991, Atkinson received the Distinguished Teacher Award from the professional medical honor society Alpha Omega Alpha. The national award is given annually to recognize outstanding accomplishments in teaching clinical sciences to medical students. In the same year, the Arthritis Foundation awarded him the Lee C. Howley Sr. Prize for Arthritis Research, considered the most prestigious arthritis research award in the country.

Atkinson received his bachelor's degree from Kansas University in 1965 and his medical degree from the same institution in 1969. He completed his internship and residency at Massachusetts General Hospital.

Smoking cessation program to be offered

A smoking cessation program that teaches behavior modification begins Aug. 12 at the School of Medicine.

The program is designed for persons who are wearing the nicotine replacement patch, but use of the patch is not required. Topics to be discussed during the four-week program include understanding the smoking habit and nicotine addiction, use of relaxation techniques and hypnosis, and behavioral techniques for diet, weight control, stress management and relapse prevention.

Cost of the program is \$180, which includes weekly sessions that last approximately one hour and 45 minutes.

The program is offered by the psychological services section of the Department of Psychiatry. For more information, call 454-2471.

Anti-depressants successfully treat depression in patients with diabetes

Researchers at the School of Medicine have demonstrated for the first time that anti-depressant drugs can successfully treat clinical depression in diabetic patients.

Depression is common in diabetic patients, according to Patrick J. Lustman, Ph.D., associate professor of medical psychology. He says diabetic patients are about three times as likely as non-diabetic patients to suffer from major depression. "It's often worse for diabetic patients because in depressed people who aren't diabetic the symptoms tend to come and go. Diabetic patients get depressed and stay depressed," says Lustman.

Though their symptoms are more debilitating, Lustman says depression often goes unrecognized in diabetics. "About two-thirds of the internists who treat diabetic patients don't recognize or treat depression," he says, adding that those who do get anti-depressant drugs usually receive the medication for treatment of diabetic neuropathy not depression.

Lustman and his team of investigators studied patients with poor glucose control and major depressive disorder. They found that diabetic patients who received the

anti-depressant drug nortriptyline for eight weeks were significantly less depressed than those who received placebo. Up to now, tricyclic anti-depressant drugs such as nortriptyline were known to be effective as analgesics, but had never been studied to see if they actually worked as a treatment for depression in diabetic patients.

Although the anti-depressant medication helped control depression, it did not control blood glucose levels as investigators had hoped it might. However, some of Lustman's other work suggests that effective treatment for depression could result in improved long-term blood glucose management. In a separate study on depression and blood glucose management, Lustman and co-investigators found that depressed diabetic patients often have problems with glucose levels simply because they aren't as likely to comply with their prescribed treatment regimen.

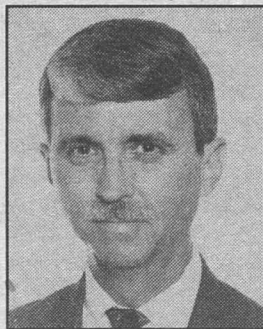
"Depressed patients are less likely to monitor their blood glucose levels as they should," says Lustman. He speculates that management of depression with nortriptyline could have the added bonus of leading to better overall disease management for diabetic patients.

Davis promoted to assistant dean for facilities

Walt Davis has been named assistant dean for facilities and chief facilities officer at the School of Medicine.

He replaces Robert Hickok, who held the position since 1984 and retired July 1. Davis will be responsible for plant maintenance and support services, power plant operations, environmental safety, and the design, construction and renovation of all facilities.

"Walt's substantial experience in the facilities management business and his professional orientation in the corporate sector provide us with an ideal background to manage our complex facilities. Our campus will continue to grow during this decade, and



Walt Davis

Walt has already demonstrated a keen ability to help us manage this growth in a responsible way," said Lee Fetter, associate vice chancellor for administration and finance.

Davis came to the University in August of 1991 as director of facilities management. In that position he was responsible for plant maintenance and support services. Prior to that, he worked for 13 years at Ralston Purina Co. At Ralston Purina, he spent eight years as an engineering consultant improving plant productivity, then was promoted to director of property management for the company's corporate headquarters. Davis also worked for eight years as an engineer and facilities manager at Johnson & Johnson in New Jersey.

He is the immediate past president of the International Facilities Management Association (IFMA) St. Louis chapter, and is currently a member of its board and is active on its program committee.

In addition, Davis serves on several committees at the medical school, including long-range facilities planning, radiation safety, public relations/community affairs, energy task force and environmental compliance management. He

will also represent the medical school on the building and grounds committee of the University's Board of Trustees.

Davis received a bachelor's degree in engineering from the United States Military Academy, West Point, N.Y., in 1964, and a master's in business administration from Farleigh Dickinson University, East Rutherford, N.J., in 1978.

Record

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 **Washington**
WASHINGTON UNIVERSITY IN ST. LOUIS

Washington People

Artistic dean leads school into the future

Joe Deal, dean of the School of Fine Arts, is committed to arts education and the role of art in society. Deal the artist creates and exhibits his photographs. Deal the dean oversees the operation of the fine arts school. And Deal as both academic and artist participates in the national dialogue on issues in the world of art.

Deal's most recent solo exhibit was a 10-year retrospective of his photographs showing the southern California landscape. The exhibit was held at the Los Angeles Municipal Art Gallery last spring.

In 1991, the Saint Louis Art Museum hosted an exhibit of Deal's latest works in a solo show titled "Joe Deal: Men and Women." That show featured works by Deal that mark a turning point in his artistic career. Typically, Deal has looked at the impact of man on the environment by focusing on the edge of cities, particularly those in the Southwest and California. His new photographs focus more on the people who inhabit that environment.

"In some ways my new work is 180 degrees from what I did before. Previously, I made black and white photographs of the landscape, usually with no people in them," says Deal, whose work has been exhibited extensively both nationally and internationally. "My new work is in color and uses interiors and people as subjects. Still there is a common thread — a focus on ordinary experience, on things that occupy everyday space. I just went from the outside in."

As a professional artist, as well as an academic, Deal is a strong advocate of the National Endowment for the Arts (NEA). Since the mid-1970s he has served on a number of peer review panels for the NEA.

Peer review panels comprise professionals and artists in a particular medium who are asked to study grant applications from other artists and organizations in that area. The panelists make recommendations about which work is most deserving of funding.

The NEA relies on these panels to help determine how and to whom grants should be awarded. The success of the NEA, says Deal, is this peer review panel system.

"When the NEA was established many people feared it was the beginning of 'state' or 'official' art, but the opposite has happened. Instead of a coterie of bureaucrats making decisions about who gets grants, the people making the recommendations are artists and professionals in the field who serve on panels as a service. It is a real privilege to serve on a panel and to see examples of the work of so many artists from all over the country."

What Deal and others consider a privilege became a struggle over basic freedoms during the height of the Robert Mapplethorpe and Andres Serrano controversy that led to the inclusion of content restrictions in NEA guidelines. The controversy centered on a few examples of each photographer's work (Serrano's "Piss Christ," for example), which some members of Congress and the general public found offensive. Deal served on the overview panel for the Visual Arts Program during this time. The overview panel, also comprising professionals and artists, helps develop criteria for NEA funding policies.

"Unfortunately, one or two artists got singled out and the entire reputation of the NEA was placed on their names," says Deal, who still serves on the overview panel. "I can't think of any artist who everyone would agree justifies the NEA."

That approach, of basing the validity of the whole cultural enterprise on the work — taken out of context — of two artists, turns the pyramid on its head, says Deal.

"When a grant is made it's made on the proven record of an artist. An NEA grant is an investment in creative exploration. It has to be accepted, as it is in other disciplines, that where there is experiment there has to be failure."

Deal says the whole controversy over artistic restrictions has had "a chilling effect" on the arts community. Individual artists and arts organizations are finding themselves looking over their shoulders.

"Freedom of expression and artistic expression are the same thing," Deal asserts. "It is no more possible to restrict artists than researchers in other fields."

Controversy in the NEA has not ended and Deal continues to focus attention on the peer review process. Deal served on a panel this summer that became embroiled in disputes when two grants, which were approved by another peer review panel, were rejected by the newly appointed acting NEA chair Anne-Imelda Radice. She rejected the grants because the art involved nudity, Deal said.

"The chair has the authority to accept or reject recommendations made by panels," Deal admits. "However, if a rejection is made for political reasons, or appears to bow to undefined 'standards of decency' rather than artistic merit, it compromises the whole process, as happened most recently."

Deal's panel issued a statement calling for a clarification from the acting chair, which was reported in The Washington Post. The panel received a response from her saying, in part that, in view of a recent court decision, standards of

needs of more than 300 students spread out over seven departments: ceramics/glass, fashion design, graphic communications (advertising design or illustration), painting, photography, printmaking and sculpture. Still, he is accustomed to juggling different needs. As associate dean at the University of California, Riverside, Deal worked with 17 departments in the College of Humanities and Social Sciences.

For his own part, Deal's goal is to keep the school among the best in the country.

"We are committed to advancing the field of art with the work of our faculty and graduate students and to provide opportunities to undergraduates to pursue advanced work," he says.

In his third year as dean, Deal already has demonstrated his ability to keep the school moving forward.

The Carolyne Roehm Electronic Media Center, which opened last fall, is an outstanding example of Deal's vision. The media center has nearly 20 computers capable of graphic design and illustration, video animation, drawing programs and video editing. In addition, one computer is set up as a "video toaster," which creates three-dimensional renderings of either static or animated objects using different perspectives and light sources.

Despite his involvement, Deal is quick to credit others with the project.

"We were really lucky that the right people (fine arts alumna Carolyne Roehm and her husband Henry Kravis) came at the right time, just as the faculty committee had submitted their report on the need to integrate electronic media into the School of Fine Arts." Roehm and Kravis donated money to launch the center.

The students seemingly agree with the faculty about the need to integrate electronic media.

"We must have hit a nerve," says Deal smiling. "I've never before seen students camping out overnight in the hall to sign up for any course!"

"We need equipment to prepare students for the professional world and the professional world doesn't stand still," says Deal. "The media center is a way to try to upgrade our facilities so when students leave here they will have the skills they need for the professional field."

"Also, those technologies are changing our culture and the way we think. So it's not just a question of providing professional skills, but a way to think about visual problems, whether you are a painter, designer or illustrator."

Another improvement Deal helped facilitate was a state-of-the-art ventilation system for sections of Bixby Hall where artists use solvents and toxic chemicals.

"The faculty has been very innovative in the past about trying to minimize the use of solvents," says Deal. "James McGarrell (professor of painting), for example, helped to initiate the use of safflower oil instead of paint thinner to clean brushes, which we will continue to do, but new ventilation was awfully important and was a huge step forward for us."

Deal is sensitive to how all these changes have improved the school, but he says faculty changes are the most far-reaching and have the most impact. Deal points out that every faculty member in the School of Fine Arts is an established professional artist.

"When someone leaves, it changes the mixture and diminishes the program in some ways," acknowledges Deal. "But, on the other hand, it presents an opportunity for us to bring in someone whose expertise complements what we already have here."

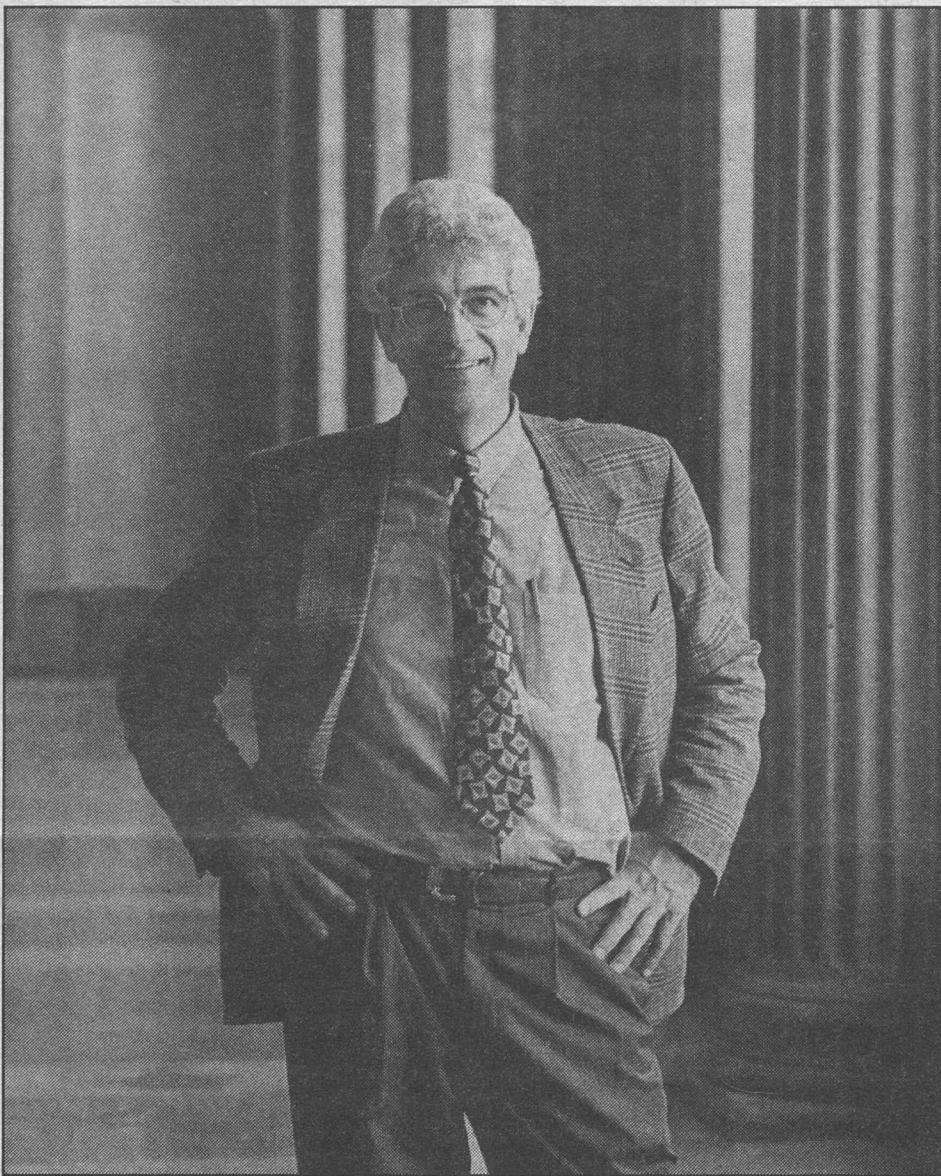
Deal is leading the school through a time of real transition. In addition to the regular changes of temporary positions, there have been three faculty retirements in three years and several more are on the horizon.

The three most recent additions to the faculty are printmaker Douglas Dowd, who is director of the first-year and sophomore Core program; Don Overmyer, assistant professor of graphic design; and Denise Ward-Brown, assistant professor of sculpture.

Deal says he knows that the faculty is the most important element of the school and often is a big reason why students choose to attend the program.

"We have high expectations for every student, and they have high expectations of us. They have ambitions to be practicing artists. That's why they come here," says Deal.

— Debby Aronson



"It's not that I am particularly good at or like administration," says the artist. "It just seems like the best way to make things happen that I care about."

decency would no longer "be considered in any part of the NEA review process or grant monitoring and evaluation process. All advisory panels will be informed about this."

Deal said he feels that artistic merit always will be a moving target.

"Contemporary art, by definition, is different from the past. The general population shies away from it until it is assimilated," Deal observes.

He points out that today's most popular art movement, Impressionism, was ridiculed and lambasted when it was first introduced. Deal insists that artists cannot ignore the general public, but must try to deal with this problem.

"Artists are not addressing future generations. They have things to say and they want their contemporaries to hear."

Deal is passionate about that need to communicate and to educate about art. He has had to learn the management side of art administration as he goes.

"It's not that I am particularly good at or like administration," says the artist. "It just seems like the best way to make things happen that I care about."

In a school with so many majors, Deal has his work cut out for him. At the fine arts school he has to balance the

Calendar

Aug. 6-29



Lectures

Friday, Aug. 7

9:15 a.m. Pediatric Grand Rounds, "Impact of Polymerase Chain Reaction on the Diagnosis of Infectious Diseases," Gregory Storch, assoc. prof. of pediatrics and of medicine, WU School of Medicine; director, Clinical Microbiology Laboratories, St. Louis Children's Hospital. Clopton Aud., 4950 Children's Place.

Wednesday, Aug. 12

10 a.m. Molecular Cell Biology and Biochemistry Program Thesis Defense, "Regulation of Tissue Factor by mRNA Stability," Shawn Ahern, WU graduate student, Department of Medicine. Room 8841 Clinical Sciences Research Bldg.

Friday, Aug. 21

9:15 a.m. Pediatric Grand Rounds, "Prenatal Genetic Diagnosis," Diana Gray, asst. prof. of obstetrics and gynecology and of radiology, WU School of Medicine. Clopton Aud., 4950 Children's Place.

Tuesday, Aug. 25

12:15 p.m. Program in Physical Therapy Brown Bag Research Seminar, "Postural Adjustments Associated With a Lower Extremity Functional Task," Vickie Stemmons, WU graduate student. Steven J. Rose Conference Room, #3400, Third Floor, East Bldg.

Wednesday, Aug. 26

11 a.m. Assembly Series Convocation with Robert Kerrey, U.S. senator from Nebraska. Graham Chapel. For more info., call 935-4620.



Exhibitions

"Display of 19th- and 20th-Century American and European Artworks From the Permanent Collection." Through Aug. 31. Gallery of Art, upper and lower galleries, Steinberg Hall. Hours: 10 a.m.-5 p.m. weekdays, except Mondays; 1-5 p.m. weekends. For more info., call 935-5490.

Calendar guidelines

Events sponsored by the University — its departments, schools, centers, organizations and its recognized student organizations — are published in the Calendar. All events are free and open to the public, unless otherwise noted.

Calendar submissions should state time, date, place, sponsor, title of event, name of speaker(s) and affiliation, and admission cost. Quality promotional photographs with descriptions are welcome. Send items to Melissa Kohne at Box 1070 (or via fax: 935-4259). Submission forms are available by calling 935-8533.

The deadline for all entries is noon Tuesday one week prior to publication. Late entries will not be printed. The Record is printed every Thursday during the school year, except holidays, and monthly during the summer. If you are uncertain about a deadline, holiday schedule, or any other information, please call 935-8533.

"The 21st General Hospital Goes to War: Honoring the 50th Anniversary of the WUMS Hospital in World War II." Through Sept. 7. Glaser Gallery, School of Medicine Library, Seventh Floor. Hours: 8 a.m.-10 p.m. weekdays; 1-6 p.m. weekends. For more info., call 362-4239.

"New Faculty Exhibit." Aug. 23-Sept. 13. Bixby Gallery, Bixby Hall. Hours: 10 a.m.-4 p.m. weekdays and 1-5 p.m. weekends.



Music

Sunday, Aug. 9

8 p.m. Dept. of Music Presents a WU Percussion Ensemble Concert with Richard O'Donnell, director. The program consists of music for multiple keyboards by local composer Michael Hunt. Concert will be held on the patio behind the Dept. of Music, Blewett A Hall, 6500 Forsyth Blvd. For info., call 935-5581.

Wednesday, Aug. 19

8 p.m. Dept. of Music Graduate Voice Recital by Deborah Stinson, mezzo-soprano. Graham Chapel. For info., call 935-5581.



Miscellany

Monday, Aug. 10

8:30 a.m. Center for the Study of Data Processing Seminar, "DB2 Application Programming," Hunter Cobb, associate, Trainer's Friend. (Seminar continues through Aug. 14, same time.) Room 11 Prince Hall. Cost: \$250 for WU faculty and staff. For more info., call 935-5380.

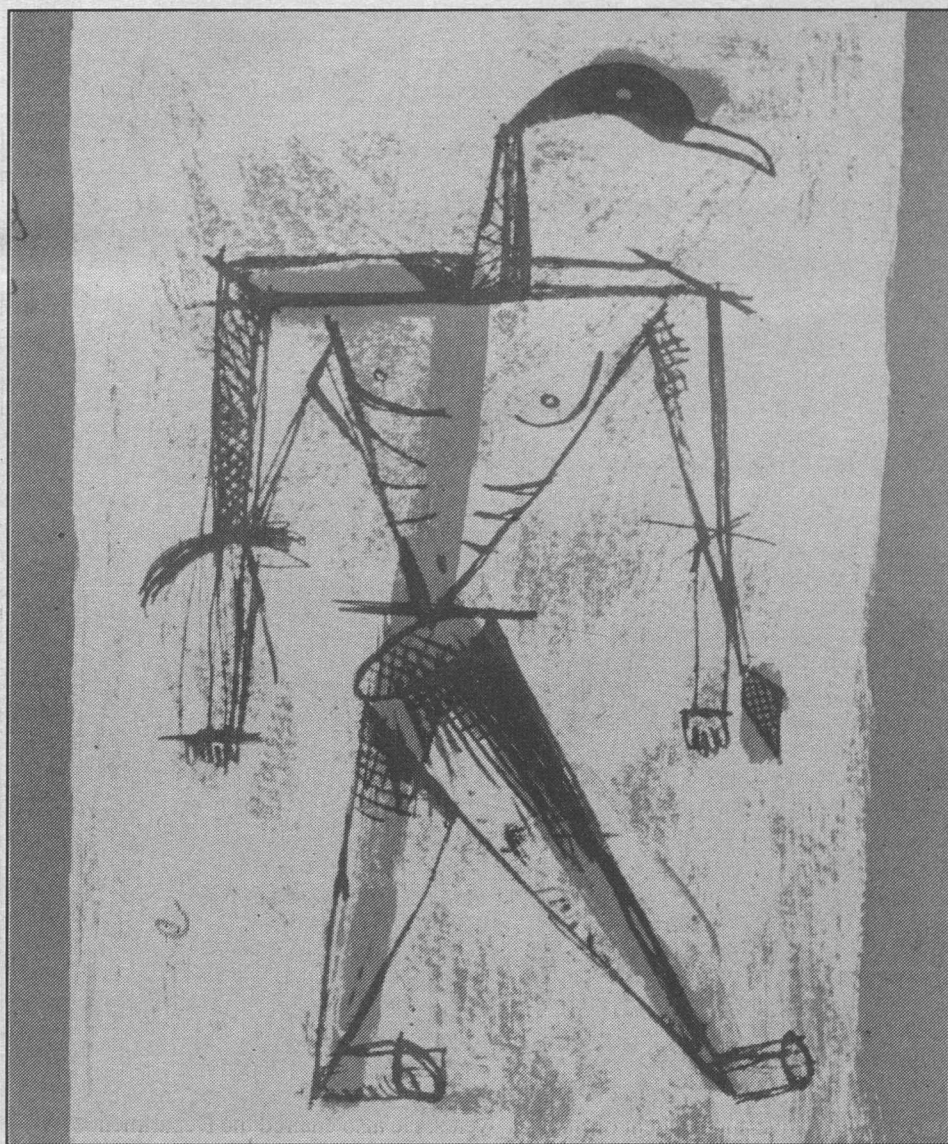
Monday, Aug. 17

8:30 a.m. Center for the Study of Data Processing Presents a Seminar, "OSI Applications and Standards," Gary Audin, consultant, Delphi Inc. (Seminar continues through Aug. 18, same time.) Room 11 Prince Hall. Cost: \$100 for WU faculty and staff. For more info., call 935-5380.

Monday, Aug. 24

10 a.m. Performing Arts Dept. Presents dance division auditions for all students wishing to enter upper-level dance classes without the prerequisite courses, primarily first-year and transfer students. Room 207 Mallinckrodt Center. For info., call 935-5858.

10 a.m.-4 p.m. Women's Society of WU Plant Sale. The sale will feature everything from windowsill plants to small potted trees. North terrace of Wohl Center, 6515 Wydown Blvd. Prices for plants will range from \$4 to \$25. Proceeds from the sale will benefit the Women's Society Scholarship Fund for WU Students. For more info., call 935-5105.



The above image is from Douglas Dowd's handmade book *John Rabbit's Grove*, a storybook for adults. Works by Dowd and three other new fine arts faculty members will be on display in Bixby Gallery Aug. 23-Sept. 13.

New fine arts faculty members showcase work at Bixby Hall

Works by new School of Fine Arts faculty members will be on exhibit Aug. 23 through Sept. 13 in Bixby Gallery.

The four new faculty members are printmaker Douglas Dowd; graphic artist Don Overmyer; painter Michael Ananian; and ceramist Michelle Hefe.

Dowd, who is director of the first-year and sophomore Core program, will exhibit selections from "Meet Me in Kuwait," a series of etchings. The series, accompanied by a letterpress-printed pamphlet, is based on images from the Persian Gulf War. Dowd has created several "artist's books," which include handmade images and letterpress-printed text. His work has been featured in many invitational and juried exhibitions focusing on fine art books and prints.

Dowd received his bachelor's degree in history from Kenyon College and his master's degree of fine arts in printmaking from the University of Nebraska-Lincoln. He was a Rotary Scholar at the Nova Scotia College of Art and Design in Halifax, Nova Scotia, during the 1990-91 academic year.

Overmyer, a local artist, joins the School of Fine Arts as assistant professor of graphic design. His work primarily has been concerned with the juxtaposition of image and type and a clear presentation of material. Overmyer will exhibit examples from his book *Law Park*, as well as projects he created while at Hellmuth, Obata & Kassabaum (HOK), an international design firm based in St. Louis.

Overmyer has worked as a senior designer at HOK since 1988. Prior to that he was assistant professor at the University of Wisconsin, Madison. Overmyer received his bachelor's degree in graphic design from Indiana University in 1976 and his

master's degree of fine arts from Yale University in 1984.

Ananian will exhibit six oil paintings ranging in size from two feet square to more than five feet in length. His work focuses on form and structure and often features human figures in landscapes. Ananian's work has a dreamlike quality because he combines fragments of childhood memories with more current images, including figures of friends and family, all in a single work.

Ananian received his bachelor's degree in drawing, painting and illustration in 1987 from the Rhode Island School of Design. The New Hampshire native received his master's degree in 1990 from the Yale School of Art, having studied with painter William Bailey and others. In 1990 he also received Yale's Elizabeth Canfield Hicks Award for outstanding achievement in drawing and painting from nature.

Hefe's pieces are fanciful and whimsical interpretations of classical forms, such as the Greek amphora (high-necked vase) and chalice. Over the past several years she has worked on creating glazes and firing processes that create different effects on the same piece to create the illusion of gem-encrusted vessels. Seven porcelain works will be featured in the exhibit — "Grapes," "Crown," "Creamer No. 3" and four others variations on the chalice form.

Hefe earned her bachelor's degree of fine arts in 1988 from the Kansas City Art Institute. She received her master's degree of fine arts in ceramics last year at the program in artisanry at Southeastern Massachusetts University.

Bixby Gallery is located in Bixby Hall. Gallery hours are 10 a.m. to 4 p.m. weekdays and 1 to 5 p.m. weekends. The gallery will be closed Labor Day weekend Sept. 5 through 7. The exhibit is free and open to the public. For information, call 935-4643.

University, W Club select first inductees to Athletic Hall of Fame

Washington University, in conjunction with its athletic support organization — the W Club — has selected its first inductees into Washington's newly established Athletic Hall of Fame.

The inaugural induction ceremonies will be held at a luncheon on campus during homecoming weekend on Saturday, Oct. 3. Later at 7 p.m., Washington's football Bears battle Trinity University on Francis Field.

The Athletic Complex lobby will house the hall of fame. Individual plaques will commemorate the inductees.

"The establishment of the hall of fame is perhaps the most significant action yet taken by the W Club," said Mitch Margo, W Club chair and a 1983 law alumnus. "We view it as a fitting honor for all those associated with the program and a potential rallying point for all alumni.

Two separate honors have been established within the new hall of fame — one category for former student-athletes, coaches and athletic department administrators, and a second distinguished service category for individuals who have significantly advanced the development of Washington University intercollegiate athletics.

The 14 charter members of Washington's Athletic Hall of Fame are:

• **Jim Barton (Engineering, 1957)** — Three-year letterwinner in basketball. He ranks fourth in all-time scoring with 1,215 points, despite playing only three seasons. A native of Edwardsville, Ill., Barton resides in Houston, Texas.

• **Jim Burst (Engineering, 1955)** — Starred in football, but also competed in basketball, baseball and track and field. Burst still holds Washington's career marks for scoring (181 points), touchdowns (30), punt return average (15.1 ypr), kickoff return average (26.5), and yards per carry average (6.8 ypc). The National Football League's (NFL) Chicago Cardinals drafted him. Burst is a native and resident of St. Louis.

• **Jim Conzelman (Engineering, 1917)** — Played football and basketball, and then later coached the Bears to three Missouri Valley Conference titles. He also coached the NFL's Chicago Cardinals to a professional title in 1947. He is enshrined in three halls of fame, including the NFL's Hall of Fame. Conzelman, who was a native of St. Louis, will be inducted posthumously.

• **Vaughan "Bing" Devine (Liberal Arts, 1938)** — Starred in basketball and baseball at Washington during the middle 1930s. He has had an illustrious profes-

sional sports career, working in the front offices of such teams as the St. Louis baseball and football Cardinals. Devine is a native and resident of St. Louis.

• **Blair Gullion (1947-59)** — Served as basketball coach and director of athletics. He helped initiate Washington's Amateur Athletic Program in 1947, which gave birth to Washington's current athletic philosophy. He is enshrined in college basketball's hall of fame with a lifetime 321-192 coaching mark. Gullion was a native of New Castle, Ind. He will be inducted posthumously.

• **Shelby Jordan (Liberal Arts, 1974)** — Four-year letterwinner in football. After earning All-America honors as a collegian, Jordan played 15 years in the NFL — nine years with the New England Patriots and six with the Los Angeles Raiders. He is a member of the Raiders' 1983 Super Bowl team. A native of East St. Louis, Ill., Jordan now resides in Rancho Palos Verdes, Calif.

• **Monroe "Poge" Lewis (Liberal Arts, 1916)** — Recognized as Washington's first "great" athlete. Lewis was the 1915 recipient of the Busch Trophy — a cup awarded to the area's top collegiate football player. He starred in football and baseball, later being offered a professional contract with the St. Louis baseball Cardinals. He was a native of St. Louis. Lewis will be inducted posthumously.

• **Dal Maxvill (Engineering, 1962)** — After an outstanding baseball career with the Bears, the current St. Louis Cardinal general manager went on to play 16 years of professional baseball — 12 with the Cardinals. He played in four World Series, winning three championships — two with the Cardinals and one with the Oakland A's. Maxvill had a career batting average of .301 at Washington. Maxvill is a native and resident of St. Louis.

• **Bruce Melin (1949-88)** — Served as Washington's athletic trainer for nearly 40 years. He also chaired the Department of Athletic's physical education and athletic program from 1972-76. Melin was inducted into three halls of fame, including the National Athletic Trainers Association Hall of Fame. Melin was a native of St. Paul, Minn. He will be inducted posthumously.

• **Don "Polky" Polkinghorne (Liberal Arts, 1959)** — Star running back during the late 1950s. Polky holds the school mark for most rushing yards in a game — 367 vs. Washington & Lee in 1957. His 17.5 yards per carry average from that game still stands as a Division II record. He ranks second in career rushing with 2,289 yards.

discs to scientists and public institutions worldwide.

This is Arvidson's second NASA Public Service Medal. He received his first in 1985.

Union Electric awards grant to Washington

The Union Electric Charitable Trust has awarded \$110,000 to the University, Chancellor William H. Danforth has announced. The money will support research and establish scholarships for students drawn from the company's service area.

The grant will be shared among three areas of the University — \$60,000 for scholarships in the College of Arts and Sciences; \$35,000 for scholarships in the George Warren Brown School of Social Work; and \$15,000 for research at the Center for the Study of American Business.

"Union Electric's generous support will help us provide students from this region with an opportunity to attend Washington University," Danforth said. "We are grateful for their continued support of the University and its students."

Sports

Diefenbach coaches U.S. Rowing team in 1992 Summer Olympics

Matt Diefenbach, head coach of Washington University's crew team, was one of 10 rowing coaches from across the United States selected to coach the U.S. Rowing team at the 1992 Summer Olympic Games in Barcelona, Spain.

Although the U.S. Rowing team did not win a medal, it did advance to the finals.

While in Barcelona, Diefenbach coached the men's pair — two rowers,

John Moore and Aaron Pollack, and one coxswain (steersman), Steven Schellens.

Diefenbach has coached the Washington rowing teams for four years. During Diefenbach's tenure, Washington has won two events in the Dad Vail regatta, the largest regatta of its kind in the United States; won the women's Visitor's Cup at the 1991 San Diego Crew Classic; and won a gold in the women's lightweight four at the 1991 Collegiate National Championships in Cincinnati.

Burdick nominated for Woman of the Year Award

Recent Washington University graduate Julia Burdick of Mentor, Ohio, who earned All-America honors on the track as well as in the classroom, has been selected as a regional candidate for the Second Annual NCAA Woman of the Year Award.

Burdick was picked by a committee of regional sports journalists as the winner from the state of Missouri and now joins 51 other student-athletes — one from each state, plus Washington, D.C., and Puerto Rico — as a regional honoree. A national panel will narrow this list to 10 finalists from which the national award winner will be named in November.

The award balances academic

achievement, athletic accomplishment and community service. The award sponsor, Champion Products, is a division of Sara Lee Corp., the official corporate partner for NCAA women's athletics programs and a leading proponent for women's sports.

Champion Products will donate \$5,000 to each of the 52 winners' schools, an additional \$5,000 to each of the 10 finalists' institutions, and an additional \$5,000 to the national award winner's school.

Burdick, a May 1992 graduate with a 3.80 grade point average in religious studies and biology, lettered twice in both cross country and track after transferring from Hamilton (N.Y.) College.

A native of St. Louis, he resides in Los Angeles, Calif.

• **Wilson "Bud" Schwenk (Business, 1942)** — Only Washington football player to have his jersey number (42) retired. In 1941, Schwenk led the nation (University Division) in passing (1,457 yards) and total offense (1,928 yards). He played in the NFL with the Chicago Cardinals, Cleveland Browns and Baltimore Colts. Schwenk was a native of St. Louis. He will be inducted posthumously.

• **Dick Yore (Liberal Arts, 1939)** — Three-year quarterback on Jim Conzelman's famed 1930s teams. He helped lead the 1935 team to Missouri Valley Conference title. Yore is a native and resident of St. Louis.

The two distinguished service recipients are actually a pair of couples, not individuals. The honorees, both outstanding supporters of Washington athletics, are:

• **Stanley and Lucy Lopata** — Benefactors of the Lopata Basketball Classic, now in its ninth year. Active and dedicated supporters of Washington, Stanley and Lucy are sponsors of academic scholarships in addition to the Lopata Classic. They have an endowed professorship in chemical engineering and have been major benefactors to the construction of several buildings. The Lopatas are residents of St. Louis.

• **William and Ann Tao** — Key supporters of Washington's men's and

women's tennis programs. The Tao Tennis Center was named in honor of the Taos for their support of tennis renovations during the 1980s. William and Ann have played an important role in developing named academic scholarships for Washington students and they proposed the Scholars in Engineering Program. The Taos are residents of St. Louis.

The selection committee that chose the charter class is composed of former Washington student-athletes representing five different eras and current athletic department coaches and administration.

Selection criteria for admission to the hall of fame requires that student athletes hold an undergraduate degree from the University, have earned their degree a minimum of five years prior to induction and have competed for a varsity sport as recognized by the University. Coaches and administrators must have begun a term of service to the University at least 10 years prior to induction. Selection of the distinguished service award will include consideration of "time, service and support to advance the well-being of the athletics programs."

In addition to the luncheon ceremony, the inductees will be recognized at halftime during the Homecoming football game. For information regarding tickets to the luncheon or game, contact the athletics department at 935-5185.

New program designed for non-profit managers

Washington University has established an academic program designed to help managers of non-profit organizations operate more efficiently.

The Advanced Certificate Program in Non-Profit Management is for managers and leaders in human service, cultural, educational, religious and community organizations. Classes for the 15-credit program, which begins Aug. 26, will be offered in the late afternoon or evening to accommodate working adult students. The five-course curriculum will examine a variety of issues that are crucial to successfully managing non-profit institutions. The courses will cover such issues as the management of volunteers and professionals, fund raising and marketing techniques, and the social and political context in which non-profit organizations operate.

"Non-profit organizations have a powerful impact on the quality of life in our community," said Thomas Hoerr, Ph.D., director of the program. "I am confident that this program can help non-profit organizations operate more effectively, making St. Louis a better place for all of us," said Hoerr, who also is director of the New City School.

The certificate program is open to qualified individuals with a bachelor's degree, although others with significant professional or volunteer experience may apply after consultation with the director. Individuals also may enroll in selected courses without participating in the full program. Tuition is \$175 per credit hour for the 1992-93 academic year.

The program is sponsored by University College. For information, call 935-6727.

News In Brief

Ray Arvidson receives NASA service medal

Raymond E. Arvidson, Ph.D., professor and chair of the Department of Earth and Planetary Sciences, was honored with the NASA Public Service Medal at a ceremony at the Jet Propulsion Laboratory in Pasadena, Calif.

The medal is awarded to non-governmental persons for exceptional contributions to NASA's missions.

He received the medal for his "exceptional contribution to the Magellan Mission, as a member of the project science group, from the development phase through mission operation and science analysis." Arvidson also is director of the Geoscience Node of the NASA Planetary Data System, housed at Washington University. The Geoscience Node is NASA's chief facility for storing and distributing NASA data collected for the surfaces and interior structures of Mercury, Venus, the Moon, Mars and the larger satellites of the outer planets.

Under Arvidson's leadership, the Geoscience Node has distributed volumes of Magellan Mission data in compact

Program encourages minority youths to own businesses

Those attempting to rebuild riot-torn Los Angeles have stressed the importance of bringing business opportunities to the minority community — an argument the John M. Olin School of Business has made for the past five years in its Minority Youth Entrepreneurship Program.

The intensive, eight-week summer study program encourages minority teens to think of operating their own business as a viable career alternative after college. Each summer about 40 high school juniors from the St. Louis region participate in the program.

"It's a great opportunity to learn the ins and outs of operating your own business," says Kreig Robinson, 16, a junior at St. Louis Priory High School. "I think it's especially important now since we're seeing such a small influx of growth in minority-owned businesses."

The idea of a minority youth entrepreneurship program was inspired by three local black business leaders — Ronald L. Thompson, Paul L. Miller Jr. and James Rivers. Thompson and Miller also are Washington University trustees. The program is sponsored by the three businessmen, Olin School and the Urban League of Metropolitan St. Louis.

More than 20 successful minority entrepreneurs are taking part in the 1992 session by visiting with students on campus or leading field trips to their businesses. This year's program runs through Aug. 8.

"It's great to see how excited the minority business people get when they come here and talk with these students," says Trina Williams, program director and a May 1992 business graduate of Washington University. "These are people who have made it in the world and they really value the opportunity to provide these students with a vision of what they too can accomplish."

Kaven Swan, executive vice-president and chief executive officer of Fleming Corp., participates in the program each year. "We participate in the program because we feel a responsibility to give these young people some idea of what's going on in the minority business community."

"Knowledge is power," he added. "This program gives students a fresh, clear look at what's going on in business."

Participants receive specialized instruction in accounting, marketing, finance and other management areas from leading professors at the Olin School. Thompson teaches a segment on entrepreneurship.

"We've been taught by some of the best professors here and the entrepreneurs that have come in have been incredible. We've all learned from their experiences," says

Robinson, who plans to get his MBA and open an import and export business.

Erica Harrington, 17, may opt for a career in journalism, but she says the program did provide her with some important insights about business.

"I didn't know anything about business and that's why I'm here," Harrington says. "I may not go into business, but these courses have taught me how to carry myself in a business setting. That will be important no matter what I do."

The program includes classes on business writing and speaking, goal-setting, library research and computer usage. Students work in teams to research, write and orally present comprehensive plans for a new business venture.

"It's exciting to see the seeds of ideas that are being planted in the minds of these 16- and 17-year-old students," says Williams. "Hopefully, once they go on to college and graduate, some of those seeds will sprout into new businesses."



Kaven Swan of Fleming Corp. leads students from Olin's Minority Youth Entrepreneurship Program on a tour of the company's Kings Heights condominium complex at 3800 N. Kingshighway Blvd. The St. Louis-based Fleming Corp. is one of the nation's largest minority-owned architectural engineering and construction management companies.

Saving endangered species — from page 1

Zoo curator of mammals, were preserving a tiny genetic pool of what was thought to be the world's only captive herd of Speke's gazelles. Templeton and Read worked with one male and three females — the only known population left — that Marlin Perkins had brought to the St. Louis Zoo in 1969 from the border of Ethiopia and Somalia in North Africa, the native range of the Speke's gazelle.

The immediate concern the biologists faced was the dangers of inbreeding. Because the genetic pool was limited, all the offspring of the original four animals shared many of the same genes. The consequence of inbreeding in most mammals and plants with long histories of "outcrossing" is genetic disease and mortality. After a few years of breeding the animals, only 20 percent of the Speke's gazelles born in the St. Louis Zoo were surviving to maturity — a classic case of inbreeding depression and a sure signal to Templeton that the herd would go extinct.

So Templeton then applied a genetics lesson he had learned with fruit flies to the dwindling herd of Speke's gazelles. He had discovered that with "founding" populations of fruit flies — small numbers from similar genetic sources — he could eliminate the genes that caused bad traits in the

inbred population through conscientious breeding. With the Speke's gazelle, he needed to know the genetic background of each animal in the herd. He and Read developed genealogies from breeding records of the animals and found that of the three original females, one had almost no genetic representation in the herd. They developed a mating design to best introduce the genes of the poorly represented female by determining which animals had most of those genes and mating them with animals that were very genetically dissimilar.

At the time, Templeton and Read believed they had the last remaining captive herd of Speke's gazelles. But a few years ago, Read learned of yet another herd of Speke's gazelles being fostered by Sheikh Al-Thani Al-Warbra of Qatar. The sheik, a gazelle lover, recently used his own entourage, with the permission of the Somalian government, to collect a herd of Speke's gazelles, which he had discovered on his own. Read journeyed to the Mideast to visit the sheik and impart some genetic profile and management ideas. The sheik offered Read animals out of his herd of 38 to give even more genetic diversity to the genetic pool of the animals in St. Louis. The four animals were to be shipped in December 1990, which was when Operation Desert

Shield was in full force, making shipment out of the Mideast impossible. A little over a year later, the "new blood" for the American Speke's gazelle herd arrived in St. Louis on Feb. 14, 1992, from a quarantine facility in Warsaw, Poland.

Impact of war

Read, at the time of negotiation with Sheikh Al-Warbra, was returning from a trip to Vietnam in another international conservation effort that, according to Templeton, illustrates the impact of war on species. Read had been gathering information on the Kouprey, a breed of wild cattle native to Vietnam, Laos and Cambodia. This region was strafed, bombed and dosed with napalm and agent orange for more than a decade, and today is still a site of guerilla warfare between various groups. After the war ended in 1975, conservation biologists became aware of this strange breed of wild cattle that looks distinctively different from other wild cattle in the region. And they worried that, no matter what it was, the animal might go extinct. A preservation program was started in the late 1980s with the cooperation of the Vietnamese government. The government was aware of the animal but had no concept of how many of them were left after decades of warfare in the region. Once again, Templeton and Read were involved in the effort to determine the genetic makeup of a species, one that conservationists believe might be a "cow of a different color."

"We want to know if it deserves to be called a species, and, if so, how much genetic diversity is there within it?" Templeton asks. "We know it looks different, and that there are maybe only 150 of these animals left, but face it, there weren't a whole lot of wildlife managers running around in that border area during the war, and there still aren't. So, very little is known about the Kouprey. The point is, you can't get genetic samples of the

Kouprey unless you go to Vietnam, and once there, you risk getting shot at."

In the late 1980s, Read went to Vietnam to get preliminary data on the Kouprey, but since then other biological contingents have gone to Vietnam and have drawn fire from insurgents.

Read and Templeton's work with the Kouprey is a prime example of how conservation biologists use genetics to determine whether an animal is a hybrid or a distinct species of its own. Hybridization, a natural phenomenon whereby one species interbreeds with another, sometimes creating another distinct species, occurs frequently in higher plants and often occurs in animals. The Plains Buffalo, for instance, is a hybrid between two species of bison, one that lived in Alaska and Siberia, the other in Canada and the United States. The far northern species for centuries was blocked from getting into the continental United States by glaciers. When the glaciers receded, the two species interbred, destroying both original species and creating a third, the Plains Buffalo.

"The new molecular techniques can show the extent of hybridization and its impact on evolution," Templeton says. "Genetics is an ideal monitoring device. Unfortunately, hybridization was not dealt with in the Endangered Species Act of 1973 because those who wrote the act didn't understand the role that hybridization plays in the natural world. There was an informal policy that 'if it's a hybrid, don't protect it,' but in some cases hybrids are a part of the evolutionary process and something from which we learn."

"Ecology, genetics, issues in air and water pollution, chemistry, earth sciences, economics, politics and sociology all are part of the portrait of today's conservation biologists, and these scientists are relying increasingly on genetics to bring the divergent areas into focus."

— Tony Fitzpatrick

1992-93 parking permits now available

Individuals may avoid long waiting lines by purchasing their 1992-93 parking permits now at the Transportation Department office, located in the Women's Building basement.

Permits for faculty, staff and graduate students went on sale July 28 — three weeks earlier than usual, to "spread out the amount of traffic at the office windows," said Gary L. Sparks, department director. Traffic at the

windows will increase significantly Aug. 24, when the department begins selling permits to undergraduates, he added. Permits may be purchased from 9 a.m. to 4 p.m. Monday through Friday (including the lunch hour).

For people using the shuttle service at the old Famous-Barr site, service begins at 6:40 a.m. Aug. 19.

For parking information, call the Transportation Department at 935-5601.

News Analysis

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

Swarm says pain treatment may end patient's wish to die

Murder charges have been dropped against Dr. Jack Kevorkian, inventor of the so-called "suicide machine." Robert A. Swarm, M.D., instructor of anesthesiology, says for many, including the judge in this case, the right-to-die issue amounts to a belief that patients with intense pain be allowed to end their misery. However, Swarm says nearly all patients who suffer with chronic pain can be helped with proper treatment.

"Two-thirds of cancer patients have severe pain at some time during the course of their disease. Only about half of them have their pain adequately managed, but over 90 percent of them can have their pain managed with oral medications. The vast majority of the remaining 10 percent can be treated with other techniques, and in all, more than 99 percent of the patients suffering with cancer pain can be successfully managed," he said.

Swarm realizes many patients believe their pain is not treatable. That's understandable, he says, because many doctors think so too.

"A real problem is that the existence of pain-relieving techniques is under-recognized and underutilized in the medical community. Even in managing terminally ill patients, especially non-cancer patients, many doctors remain concerned about the potential for opioid abuse or addiction. Drugs such as morphine and codeine do have abuse potential, but current literature indicates that the vast majority of patients without a history of drug or alcohol abuse can take these medications under the direction of a physician for pain relief for many years without abuse or addiction."

Though he admits that pain is not the only factor in the "right-to-die" debate, Swarm says he thinks it is a major fear for many who would support physician-assisted suicide.

"Severe, uncontrolled pain is too often the main factor behind a patient's wish to die. It is wrong to simply offer patients the right to die when pain relief and appropriate palliative care could revert the patient's wish to die back to a wish to live."

Swarm is the director of the Pain Management Center at Washington University Medical Center, where he specializes in the treatment of patients suffering with chronic pain. Swarm's team uses a multidisciplinary approach employing anesthesiologists, psychologists and physical therapists to develop individualized therapies for his patients.

Women binge eaters sought for study

The Department of Psychology is recruiting women to participate in a study on the personality and eating styles of binge eaters. Women who are binge eaters, age 18 and older, and of average weight are sought for the study.

Participants will fill out several questionnaires and take part in a brief interview. Individuals will be paid \$5. The study, which will be conducted in a psychology laboratory at the University, takes approximately one hour to complete.

For more information, call 935-7521.

For The Record

For The Record contains news about a wide variety of faculty and staff activities.

Of note

The Washington University Eye Alumni Association presented the Distinguished Alumnus Award to **Benjamin Milder**, M.D., professor of clinical ophthalmology, at its annual meeting. ...

The National Endowment for the Humanities has awarded a grant to **Dolores Pesce**, Ph.D., associate professor of music, to complete her work on Guido d'Arezzo, the 11th-century theorist who proposed the didactic singing aid, "ut (do) re mi fa sol la." Pesce is writing a critical analysis of his work ...

Teresa J. Vietti, M.D., professor of pediatrics and of pediatrics in radiology, was the recipient of the 1992 John Krey III Memorial Award for Outstanding Scientist/Researcher. The award pays tribute to Vietti's excellence in oncology research and cancer control. The St. Louis City Board of the American Cancer Society sponsored the award. ...

Michael J. Welch, Ph.D., professor of radiology and director of radiation sciences at the Mallinckrodt Institute of Radiology, is the recipient of the Society of Nuclear Medicine's 13th annual Georg Charles de Hevesy Nuclear Medicine Pioneer Award. The awardee is chosen annually by the society's president, based on his or her overall accomplishments in the field of nuclear medicine.

Speaking of

Albert Baernstein II, Ph.D., professor of mathematics, visited China as a speaker in the Special Year in Complex Analysis at the Nankai Institute of Mathematics in Tianjin. He also lectured at Beijing University, Fudan University in Shanghai, Hangzhou University and at the Institute of Mathematics of the Academia Sinica in Beijing. ...

A paper titled "Tell Me, Don't Show Me," by **Marianne Erickson**, a graduate student in comparative literature, was presented during the 1992 annual convention of the Conference on College Composition and Communication in Cincinnati. The paper was presented by Jim Fredal of the University of Louisville as part of the panel titled "What We Hear When We Listen to the Deaf." ...

Ronald G. Evens, M.D., Elizabeth E. Mallinckrodt Professor and head of the Department of Radiology and director of the Mallinckrodt Institute of Radiology, delivered the Sydney Watson Smith Lecture to the Royal College of Physicians in Edinburgh, Scotland. Evens, a recognized authority on the socioeconomics of medicine, was the keynote speaker for the symposium on "New Imaging Techniques." His talk, "Introducing a New Technology: Magnetic Resonance Imaging as a Paradigm," addressed the most beneficial and cost-effective ways of using this new imaging technology. ...

"External Diseases of the Eye" was the topic of a paper presented by **Jack Hartstein**, M.D., clinical professor of ophthalmology and visual sciences, at the 24th International Contact Lens Congress held in Atlantic City. As a guest speaker for the St. Louis chapter of the National Sjogren's Society, Hartstein spoke on "Eye Findings in Sjogren's and its Systemic Manifestations." In addition, he attended meetings in London and Stockholm to evaluate the European experience with the Excimer laser, which is designed to eliminate the need for glasses. ...

Mohamed-Salah Omri, a lecturer in Asian and Near Eastern Languages and Literatures and a graduate student in comparative literature, presented a paper on "Literature of the Nineties in Tunisia: An Interpretation." He presented the paper at the Middle Eastern Literary Seminar at the University of Pennsylvania in Philadelphia. His paper, "Literature of the Nineties in Tunisia: Making Sense of the Fin de siècle," won the \$500 Ann and Malcolm

Kerr Award. He presented the paper at the *Jusur* Graduate Student Conference on the Middle East at the University of California, Los Angeles. ...

Gruia-Catalin Roman, Ph.D., professor in the Department of Computer Science, gave an invited talk on "Program Visualization: The Art of Mapping Programs to Pictures" at the 14th International Conference on Software Engineering held in Melbourne, Australia. **K.C. Cox**, a doctoral student in computer science, co-authored the paper. Roman also presented a paper titled "Seeking Concurrency in Rule-based Programming." The paper is co-authored by **R.F. Gamble**, who received her doctorate in computer science in May 1992, and **William E. Ball**, D.Sc., professor of computer science. ...

Paul Ullman, affiliate professor of finance in the Department of Engineering and Policy, delivered a talk he wrote with **Murray L. Weidenbaum**, Ph.D., Edward Mallinckrodt Distinguished University Professor and director of the Center for the Study of American Business. The talk, "A Global View of the Opportunities in the United States Economy," was presented to a symposium of Asian bankers and trust officers in Hong Kong. ...

Val Saffron, a lecturer in the Performing Arts Department, presented a session titled "So You Have to Give a Speech ... What Are You Saying? How Are You Saying It?" She gave the talk during Clemson University's 109th Conference on Professional Development for Women. ...

At the 45th annual Kentucky Foreign Language Conference in Lexington, **Stephan K. Schindler**, Ph.D., assistant professor in the Department of Germanic Languages and Literatures, presented a paper titled "Scheidewand und Seelenlähmung: das Kind und die symbolische Ordnung in K.Ph. Moritz' *Anton Reiser*." ...

William Van Watson, Ph.D., a lecturer in the Performing Arts Department, presented a paper titled "*La roba*: Giovanni Verga's Materialist Center" at the Mid-America Theatre Conference in Chicago. At the American Association of Italian Studies Conference in Chapel Hill, N.C., he presented a paper titled "Shared Strategies of Subversion: The Solutions of John Donne and Caravaggio to the Aesthetic Crisis of Late Renaissance Mannerism." At the Society for Cinema Studies Convention in Pittsburgh, he spoke on "Shakespeare, Zeffirelli and the Inverted Gaze in 'The Taming of the Shrew.'" ...

David F. Williams, M.D., instructor in clinical ophthalmology and visual sciences,

presented a lecture on "Surgical Treatment of Macular Holes" at the ARVO meeting in Sarasota, Fla. Williams also spoke about surgical treatment of macular disease at the Alcon Conference and Exposition in Orlando, Fla. In addition, Williams spoke at Creighton University in Omaha, Neb., on diseases of the retina and vitreous. ...

To press

Liselotte Dieckmann, Ph.D., professor emerita of German and comparative literature, has published her translation of *Anton Dohrn, A Life For Science* by Theodor Heuss. Her translation of *Letters From the War* by Klaus Lankheit and Uwe Steffen will be published this year.

Et cetera

As part of the Great Artist Series Mozart Bicentennial Celebration, **Seth Carlin**, professor of music, and **Maryse Carlin**, instructor of music, performed at Lincoln Center. Seth Carlin's Schubert Sonata series at Merkin Hall in New York is being broadcast over more than 140 affiliate stations nationwide on the program "Performance Today" produced by National Public Radio. ...

Donald Finkel, poet in residence emeritus, participated in a series of programs centered on *A Splintered Mirror*, the collection of work by seven contemporary Chinese poets translated by Finkel and Carolyn Kizer. The Academy of American Poets and The Asia Society sponsored the series.

Making the news

In a recent issue of Career Futures magazine, **Alfreda Brown**, director of the Career Center, reported an increasing incidence of so-called "transitional positions" for new college graduates. These are jobs with responsibility and action but without long-term commitment. The magazine said that Brown compiled a notebook of such transitional positions for Washington students.

Guidelines for submitting copy:

Contributions regarding faculty and staff scholarly or professional activities are encouraged. Send a brief note with your full name, complete title, department and highest-earned degree, along with a description of your noteworthy activity to *For The Record*, Campus Box 1070. Items must not exceed 75 words. Please include a phone number. **Items must be typewritten to be accepted.** For more information call 935-5235.

Campus Authors

The following are recent releases available at the Campus Bookstore in the Mallinckrodt Center. For more information, call 935-5500.

In *The Past Leads A Life Of Its Own*, Wayne Fields, Ph.D., professor of English, recaptures an American boyhood and explores the subtle and devious ways in which memory keeps the past alive in all of us, ceaselessly transforming the present. *The Past* is Fields' first work of fiction. For Lonnie, the boy in these stories, there are painful, inescapable lessons: the discovery of death as idea and as fact; the anguish of his father's search for work in hard times; the growing awareness of his parent's vulnerability. There are, too, the memories that will sustain him all of his life — his mother's love and dependability, his father's dignity in adversity, his dying grandfather's invaluable lesson. *The Past* is about the epiphanies that form a character and shape a life — fragments of the children we were that will neither go away nor grow up, that even in adulthood can render us childlike, powerless and uncertain. (Poseidon Press)

In *Nomad: A Year In The Life Of A Qashqa'i Tribesman In Iran*, Lois Beck, Ph.D., professor of anthropology, documents the migratory cycle of the Qermezi. The Qermezi are a subtribe of the Qashqa'i confederacy of southwest Iran. The book is based on the daily journals Beck kept as she followed the Qermezi during a year of debilitating drought and new restrictive government policies. Beck describes the rigors of nomadic life, the expanding power of the state, and the diminishing power of the tribal leaders and institutions. She focuses her account on Borzu Qermezi, a complex, proud, strong-willed, witting, and cunning man who had been the group's head and political leader since 1964. (University of California Press)



Wayne Fields

Opportunities & personnel news

The following is a list of positions available on the Hilltop Campus. Information regarding these and other positions may be obtained in the Office of Human Resources, North Brookings Hall, Room 126, or by calling 935-5990.

Lab Technician

920209. *Biology*. Requirements: Bachelor's degree with skill in photographic printing (micrographs); must have good background in chemistry, molecular biology and biochemistry; must have good organizational and time management skills. Resume and three letters of recommendation required.

Grant/Research Secretary

920230. *School of Social Work*. Requirements: Some college; 50 wpm typing; PC experience or ability to quickly develop proficiency in the use of a PC; transcription experience; good knowledge of English grammar and spelling; ability to work well with research projects; must possess or quickly develop an understanding of external funding guidelines that apply for the preparation of grant proposals. Clerical testing and three letters of recommendation required.

Administrative Assistant

920231. *School of Social Work*. Requirements: Associate's degree, bachelor's degree preferred; 40 wpm typing with accuracy; good communication skills; attention to details; recordkeeping ability; prior experience with computers; ability to meet with students; possess secretarial skills; ability to handle confidential information of a fiscal nature. Clerical testing and three letters of recommendation required.

Senior Manager of Computer Engineering

920252. *School of Technology and Information Management*. Requirements: Master's degree, doctorate preferred; degrees should be in a pertinent field of engineering with advanced degree in computer science, engineering, systems science or business; excellent communication skills; minimum of seven years of applicable work experience with teaching experience as a component of the work experience (this requirement is subject to review based on other attributes); ability to plan, organize, and lead special project and research-oriented activities. Resume and three letters of recommendation required.

Finance and Technology Accounting Manager

920253. *Patent Program*. Requirements: Bachelor's degree; excellent accounting and data base skills needed to manage University financial transactions in the area of patenting and licensing and also to manage departmental budget elements; creativity and leadership involved; design, develop, and implement tracking procedures for internal needs and compliance with federal regulations; collect funds due to University patent program; correspond with faculty, attorneys, licensees; prepare reports, make analyses and projections for internal and external purposes; PC oriented data base work will mainly involve LOTUS use; mainframe usage also will be required; familiarity with University accounting system preferred, as is experience with data base design; familiarity with patents, licensing and federal regulations useful. Resume required.

Recorder/Office Assistant

920257. *Law School*. Requirements: High school graduate with a minimum of one year of college; typing 35 wpm with accuracy; excellent organizational skills; excellent communication skills; ability to be flexible; knowledge of WordPerfect software preferred; must be a U.S. citizen and registered voter (or willing to become one) for service as a notary public. Clerical testing and three letters of recommendation required.

Secretary II

930001. *Department of Athletics*. Requirements: High school graduate with a minimum of two years of college; typing 75 wpm with accuracy; must be flexible with time and duties and able to get along well with others; ability to meet and assist students, faculty, staff, alumni and guests and present a positive image for the athletics department. Clerical testing and three letters of recommendation required.

Assistant to Registrar/Department Secretary

930002. *School of Fine Arts*. Requirements: High school graduate with a minimum of one year of college; typing 50 wpm with accuracy, accurate word processing/typing, excellent language and grammar skills; knowledge of office machines, including personal computers, knowledge of online and other University procedures; good communication skills, excellent filing and recordkeeping; ability to work well with students, faculty and staff. Dependability and flexibility a must. Willingness to work under pressure; ability to handle details and prioritize tasks. Minimum two years prior office experience. Clerical testing and three letters of recommendation required.

Research Associate

930003. *Earth and Planetary Sciences*. Requirements: Minimum four years of college; optical microscopy skills; familiarity with identification of minerals in thin section; skill in use of a petrographic microscope. Resume and three letters of recommendation required.

Reference Librarian

930004. *School of Business*. Requirements: Master's degree, ALA accredited MLS. Reference assistance to library patrons using print sources, compact disc products, and online products. Provide instruction on use of NEXIS. Responsible for preparation of "working papers list" done with use of data management software program; online searching; fill in at the Circulation/Reserve Desk. Fall and spring semester working hours: noon to 6 p.m. Saturday; 1 to 6 p.m. Sunday; 3:15 to 7:15 p.m. one weekday. Responsible for all operations in the library during the weekend. Implements and interprets policies. Resume and three letters of recommendation required.

Administrative Assistant

930005. *Center for the Study of American Business*. Requirements: High school graduate, bachelor's degree preferred. Typing 50 wpm with accuracy, superior typing and verbal skills. Needs to be familiar with personal computer and basic accounting skills. Clerical testing and three letters of recommendation required.

Senior Periodicals Editor

930006. *Office of Public Affairs*. Requirements: Bachelor's degree required. The senior editor is responsible for

development research, writing, editing, proofreading, scheduling, and monitoring production of the magazine pages of the Washington University Magazine and Alumni News; work with appropriate public affairs staff in planning and securing necessary design services, photography and graphics; assume budget control and production quality while meeting deadlines; identify appropriate contents for upcoming issues of periodicals. Resume, two writing samples, and three letters of recommendation required.

Athletic Programs Assistant

930007. *Department of Athletics*. Requirements: Bachelor's degree required, master's degree preferred in physical education or related field. Coaching and administrative experience; ability to work effectively with the athletics department and within the environment of a highly selective university. Resume and three letters of recommendation required.

Student Services Coordinator

930009. *School of Business*. Requirements: Minimum of two years of college, associate's degree preferred. Typing 40 wpm with accuracy; ability to interact and maintain positive relationships in dealings with students, faculty, administrators, staff, and members of the general public. Ability to write and proofread accurately. Three to five years work experience, university experience preferred. Ability to rapidly produce accurate work. Ability to handle 150 or more telephone calls per day effectively. Ability to work with a minimum amount of supervision. Clerical testing and three letters of recommendation required.

Administrative Secretary

930010. *School of Business*. Requirements: High school graduate, associate's degree preferred. Typing 50 wpm with accuracy. Excellent telephone/interpersonal skills; professional appearance; knowledge of office procedures; ability to prioritize and handle multiple tasks; demonstrated written and proofreading skills. Clerical testing and three letters of recommendation required.

ECS Programmer/Lab Manager

930015. *Educational Computing Services*. Requirements: Bachelor's degree required. Knowledge of Novell and TCP/IP networking, familiarity with DOS, Macintosh & UNIX desktop systems; ability to learn quickly and adapt to new circumstances; ability to work with minimal supervision; good language and people skills. Resume and three letters of recommendation required.

Librarian Part-time

930016. *School of Social Work*. Requirements: Master's degree required. Experience with reference sources (social work). Knowledge of online searching, preferably BRS, CD-ROM, and SUIIS online highly desirable. Resume and three letters of recommendation required.

Lab Technician

930018. *Biology*. Requirements: Minimum of four years of college, bachelor's degree preferred. Compound microscope skills preferred. Maintain cell cultures. Prepare cells for experiments. Resume and three letters of recommendation required.

Work Processing Operator

930019. *School of Social Work*. Requirements: Minimum of one year of college, associate's degree preferred. Typing 50 wpm with accuracy. Able to proofread own work; transcription experience; above average knowledge of English grammar and spelling; ability to train personnel. Pleasant telephone manner. Ability to work with students, faculty, administrators, and staff under minimum supervision. Clerical testing and three letters of recommendation required.

Marketing Assistant

930020. *Edison Theatre*. Requirements: Bachelor's degree required. Typing 65 wpm with accuracy. Applicant should enjoy working with people of all ethnic backgrounds and interests. Applicant should be a "people" person. Background in the arts very helpful. Applicant should be a self-starter yet a team player. Driver's license, car helpful. Clerical testing and three letters of recommendation required.

Assistant Director for Alumni Programs

Alumni and Development Programs. Preferred qualifications include a minimum of a baccalaureate degree and at least two years experience in alumni relations, public relations, sales, or related field. Preference will be given to candidates who have graduated from Washington University. Candidates should have excellent writing, speaking and organizational skills, and be willing to travel. Self motivation is essential. Salary is competitive. Application deadline is Aug. 21, 1992. Send resume and three letters of recommendation to: David F. Jones, Assistant Vice Chancellor and Director, Alumni and Development Programs, Washington University, Campus Box 1210, One Brookings Drive, St. Louis, MO 63130-4899

Director

Center for Engineering Computing. Duties include: Resource planning; managing day-to-day operations of UNIX, Macintosh, and DOS systems dedicated to instructional engineering computing; supervising technical and administrative staff; staff and user training. At least five years experience in managing technical support staff required. Experience with Unix workstations and engineering CAD applications will be important assets for the successful candidate. Bachelor's degree in engineering or computer science required. This position reports directly to the dean of the School of Engineering and Applied Science. Salary will be commensurate with qualifications. To apply, send resume to School of Engineering and Applied Science, Washington University, Center for Engineering Computing, One Brookings Drive, Campus Box 1207, St. Louis, MO 63130-4899

Medical school openings

The above listing includes only those positions available on the Hilltop Campus. Plans are under way to include School of Medicine job vacancies in the *Record*. The medical school now posts available positions at the Office of Human Resources, 4480 Clayton Ave. Interested employees may view the job postings between 8 a.m. to 5 p.m. Monday through Friday. People interested in applying for these jobs can make an appointment to talk with one of the recruiters while visiting the office.