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In-placement becomes campuswide effort

Washington University employees have heard a great deal about the efforts of a new committee — the In-placement Committee — over the past few months. Anticipating that process mapping and reorganization might result in the elimination of some positions, the committee formed last winter to investigate ways to keep good employees who are displaced.

“We knew that departments may have to reorganize to meet new budget requirements. We also knew that process mapping might change the make-up of the workforce in different departments. There is a real possibility that we might have

“Rather than lay people off, we are developing a structure to maximize the chance of finding other suitable employment here at the University.”

— Sara Johnson

excellent performers displaced,” said Sara Johnson, special assistant to the chancellor and chair of the In-placement Committee.

Is the concept of “in-placement” workable at Washington University? So far, the answer appears to be yes.

When Washington University modernized its power plant operation last summer,

four workers’ jobs were eliminated. Today, the four employees are working as maintenance crew members for the University’s Department of Facilities and Management’s Technical and Maintenance Operations.

As the University sold some of its off-campus real estate, two employees of the properties management division found that

their duties, which included taking care of off-campus buildings, were becoming unnecessary. Today, both are working full time for the Department of Facilities and Management; one is managing the West Campus, the other is managing the Hilltop Campus’ green zone.

An employee who worked in the payroll division of Accounting Services indicated that she would rather work on the Hilltop Campus, in a more academic environment. She now is doing accounting for the Department of Biology.

“She is a terrific employee and we hated to see her go, but she’s still at the University.”

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St. Louis carjackings urge police warning

Carjacking is becoming the “growth crime of the 1990s,” according to The National Crime Prevention Council. In response to two recent incidents in St. Louis, the Washington University Police Department has released tips to make people less vulnerable to this new kind of car theft.

On April 14, a Washington University student suffered a minor concussion when she was hit over the head with a rock and her friend’s vehicle was stolen as she left an internship assignment at 23rd and Pine streets in St. Louis. The day before, a Clayton man was killed when he resisted an armed carjacker in the parking lot of the Mid-County YMCA in Brentwood. Washington University Police Chief William Taylor said no one should assume that he or she is immune to this new type of crime.

“Just because you drive an older or less attractive vehicle, don’t be lulled into a false sense of security,” Taylor said, explaining that some criminals carjack just to joyride and, according to recent law enforcement research, some gangs have adopted carjacking as an initiation rite.

Law enforcement officials attribute the nationwide increase in carjacking to the fact that criminals find it easier to take a vehicle directly from a person using the keys than to break into a vehicle, especially with today’s elaborate alarm systems.

The University Police Department in conjunction with The National Crime Prevention Council offers the following tips to avoid carjacking:

- Be alert to any activity near your car.
- Have your key in your hand when approaching your car and check the handles, locks and backseat before entering.
- Once you’re in your car, keep your doors and windows locked.
- Stay out of high crime areas, especially after dark.
- Be suspicious of people approaching your car asking for directions or change or giving out flyers.
- When stopping in traffic, leave enough distance between your car and the one in front of you so you can pull away quickly.
- If a suspicious-looking person approaches your car, drive away carefully, even if you must go through a traffic light.
- If you’re driving home and there’s somebody walking down the street that you don’t recognize, drive around the block and come back after that person has left.
- If another driver bumps your car or your tire goes flat, keep your doors and windows closed and wait for the police to arrive or drive slowly to the nearest police station.
- Be alert when using drive-up automated teller machines.
- If you have a cellular phone, call for help.
- If you are confronted, don’t resist.



Sophomore Brett Levin sports a red nose after making a donation supporting Sudden Infant Death Syndrome (SIDS) awareness. Red Nose Day USA is a public awareness and fund-raising campaign for SIDS. Organizers say “when you wear a red nose on April 15, you make your concern for saving babies’ lives as plain as the nose on your face.” Pan-Hellenic President Jamie Gray (left), a junior, and sophomore Elizabeth Ryan volunteered in Mallinckrodt Center, distributing red noses for a donation. A drive also was held in the sorority suites.

‘Service for Success’

Employees train fellow employees to be more effective at their jobs

About 20 employees from several University departments spent much of last week learning how to be more efficient and effective at their jobs. These employees will teach other employees what they’ve learned and eventually every employee at Washington University will have had the opportunity to be trained in the principles of “Service for Success.”

The training program began at Washington University earlier this year when about 50 employees were nominated from across the Hilltop Campus to participate in two pilot groups.

During the pilot sessions, Mary Ammerman, a service training consultant with Ammerman Associates Inc., focused on four areas: service, communication, managing communication and handling difficult situations. From the original 50 participants, 20 individuals were selected to continue in the program and attend the first session of “Train the Trainer” this month.

Employees who attended the initial sessions in February say they already are

applying the skills they learned. In the service context, for example, employees learned to evaluate how they are perceived by others. During the communication lessons, they learned the difference between assertive and aggressive behavior, the importance of non-verbal communication and how to listen and question effectively. In the final lesson, employees learned specific techniques to handle difficult situations.

“These are skills that everyone can take back to the office and use on a daily basis,” said Lauri Strimkovsky, business manager in the School of Law. “What we learned are not esoteric theories, but real communication skills, goal-setting techniques that we can really use. I have been to many professional development workshops, but I found this to be right on target.”

The mission of the “Service for Success” program is “to provide an ongoing service training program for the benefit of those whom we serve (students, parents, alumni, faculty, colleagues and others) and

to help us all be more effective in what we do in support of the mission of Washington University.”

“Train the Trainer” sessions emphasize experiential techniques, including real-life

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Medical Update

Findings give insight on developing nervous system

New clues that reveal how the nervous system establishes and maintains stable synaptic connections for a lifetime may help scientists understand how experience permanently alters circuits in the brain, according to School of Medicine researchers.

Studies of the neuromuscular junction in newborn mice, the synapse where nerves from the spinal cord make contact with muscle fibers, by Jeff W. Lichtman, M.D., Ph.D., and colleagues, have yielded surprising evidence about how "learning" is induced by changing the structure of synaptic connections. One of the surprising results of this work is that a muscle fiber selects which nerve will innervate it. This selection is based on the patterns of electrical activity that emanate from competing neurons. It always has been assumed that the nerve does the choosing, said Lichtman, a professor of neurobiology at the medical school.

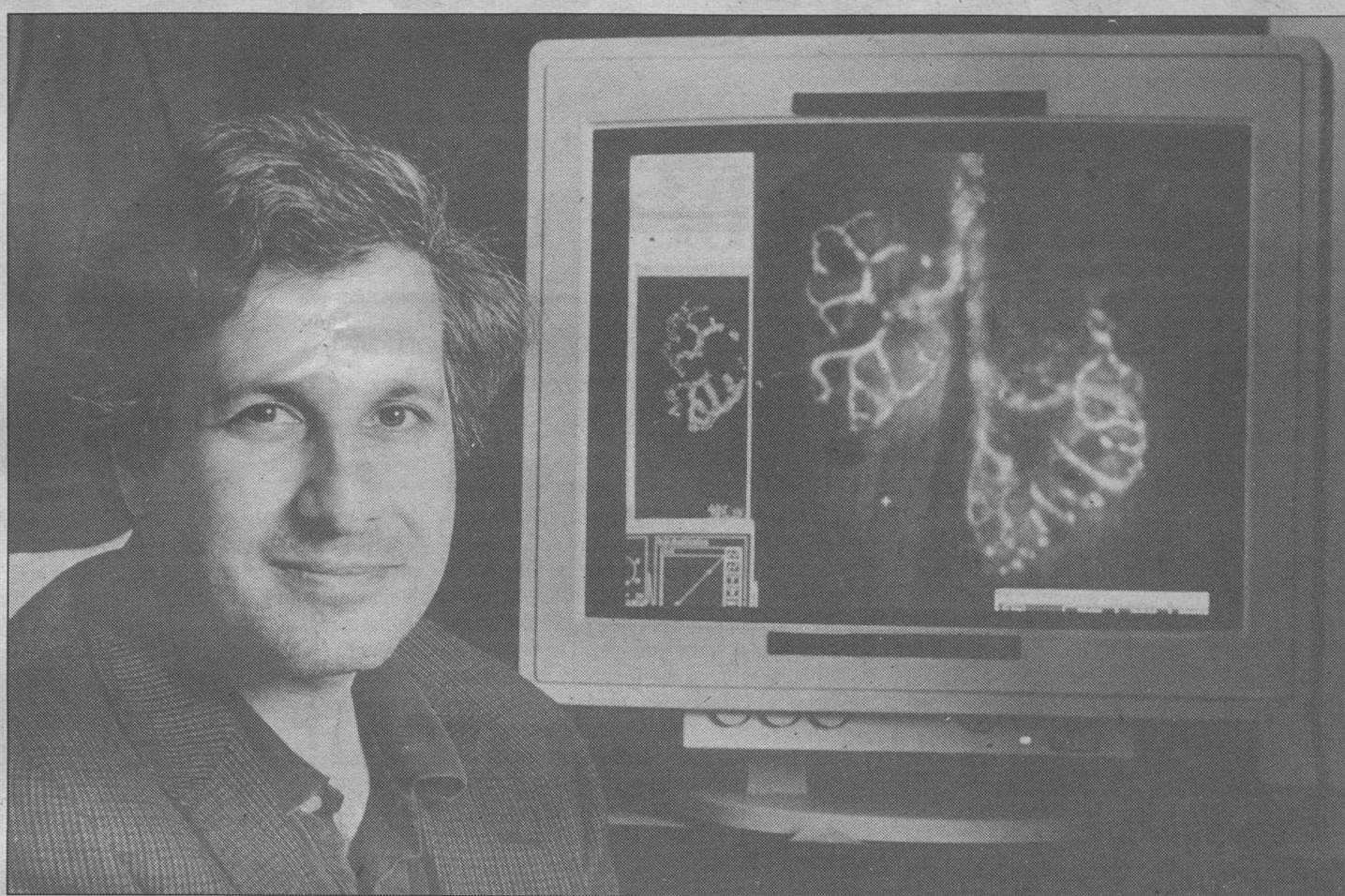
His report, titled "Imaging Synapses in Living Animals," was presented recently during the annual American Association for the Advancement of Science (AAAS) meeting in San Francisco.

Early in development, each muscle is contacted by two or three neurons — more than it will ultimately need. In the first two weeks after birth, excess synapses are pruned away, leaving each muscle fiber innervated by only one neuron. These connections will remain mainly intact for a lifetime.

The forces that permanently shape the developing nervous system have long been inscrutable to scientists. Lichtman's group has devised a method for selecting, staining and viewing the same neuromuscular junction over a period of months. "We can visualize synapses in living animals in a way that we can come back and find the same synaptic connection over and over again during the lifetime of the animal or over shorter periods that we might be interested in," Lichtman said.

Lichtman views the events that lead to one muscle fiber selecting one nerve from a pool of two or three "competitors" as a paradigm for understanding how this long-term, structural change in the nervous system occurs. The work began as a project to follow a synapse over the lifetime of a mouse. There were many hints in the scientific literature, he said, suggesting that synapses are remodeled and that they have a shorter lifetime than the life of the animal. After viewing one synaptic junction over the lifetime of the animal, Lichtman's group surprisingly discovered that guess was wrong. "Synapses do have a long life, they live about as long as the animal does, in old age they seem to break down a little bit, but otherwise they are remarkably stable."

More unexpected findings came as they focused their microscopes on the events that occur at the neuromuscular junction during the first two weeks of life. During this time, a massive pruning away of inappropriate connections occurs in the neuromuscular



Jeff Lichtman, M.D., Ph.D., has devised a method for selecting, staining and viewing the same neuromuscular junction of newborn mice over a period of months. This technique, magnified in this microscopic image, provides a unique window on the developing nervous system.

junction. The same changes take place in the central nervous system at this time. So, a muscle fiber that is in contact with two or three neurons ends up with only one connection after this two-week period. How this kind of pruning happens has been one of the intractable problems of neuroscience.

Lichtman and his colleagues watched as two nerves competed for the right to innervate a single muscle fiber. Side by side as equals they sit, within microns of each other, both "talking" by releasing neurotransmitter over the proper receptors on the muscle fiber. Over time, one nerve wins the battle and the loser gradually withdraws.

The remaining neuron maintains its own connection and essentially "ignores" the vacated synaptic area. A closer look proved even more eye-opening: the receptors had vanished from the site where the "losing" neuron contacted the muscle fiber.

Yet, microns away, the situation was quite different; the winning neuron continues to have a high density of receptors underneath. The next question Lichtman's group asked was whether the nerve or its receptors disappeared first. They found that

the muscle fiber withdrew receptor sites before the nerve withdrew.

These events left Lichtman with plenty of questions to consider. How can the muscle differentiate two sets of contacts, both from neurons coming from the right part of the spinal cord, both from neurons releasing the same neurotransmitter?

The answer, he believes, is to be found in the discourse between nerves and receptors, a language created by electrical activity from nerve inputs. No two inputs talk at the same time — they fire asynchronously.

Lichtman and postdoctoral associate Rita Balice-Gordon, Ph.D., designed an experiment to see if experimentally induced changes in neural activity could give rise to changes in connections in a muscle that are exactly the same as those that occur during development. In a living mouse, they studied a neuromuscular junction in which they locally blocked the ability of acetylcholine receptors in a minute region of the synapse to bind to acetylcholine. Ordinarily all receptors in this region receive input (acetylcholine) at the same time, or synchronously. This specially modified muscle fiber was normal except for

the small blocked region. Lichtman and Balice-Gordon found that the muscle notices the difference almost immediately. "Within days, all the receptors in that region disappear, and shortly the nerve terminal sitting over them falls off," he noted. "The change is permanent." If, however, all receptors at the neuromuscular junction are blocked, nothing happens at all. The connection remains, meaning that only in the presence of activity are inactive regions eliminated.

"By changing the experience at a neuromuscular junction, you can cause a permanent change in the connections there," Lichtman said. "Although you don't think of the neuromuscular junction as being part of the brain, it is a synapse that is showing the sort of activity-mediated change that is probably going to inform on those long-term changes that take place in learning and memory."

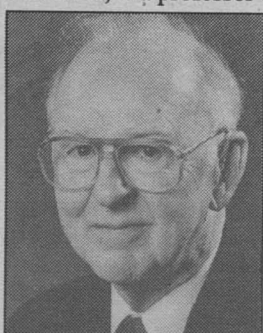
— Jim Keeley

The forces that permanently shape the developing nervous system have long been inscrutable to scientists.

Nobel Prize winner Edwin Krebs to deliver Erlanger-Gasser Lecture

Nobel Prize winner Edwin G. Krebs, M.D., will deliver the annual Erlanger-Gasser Lecture Friday, April 29, at the School of Medicine.

Krebs, a 1943 graduate of the School of Medicine, is a professor emeritus of pharmacology and biochemistry at the University of Washington in Seattle and a senior investigator emeritus of the Howard Hughes Medical Institute.



Edwin G. Krebs

He received the 1992 Nobel Prize in medicine for his work explaining how enzymes are activated and deactivated, a biochemical process critical to nearly all cellular functions. Today, between 50,000 and 100,000 research papers are published each year based on this landmark discovery. His investigations — and re-

search by others based on his work — have had an impact on areas as diverse as transplantation, endocrinology, growth and development, immunology and cancer.

Krebs will discuss his work in a lecture titled "Protein Phosphorylation Cascades and Growth Factor Signaling" at 4 p.m. in the Carl V. Moore Auditorium of the North Building, 4580 Scott Ave.

In addition to being a graduate of the medical school, Krebs also completed a research fellowship in the University's biological chemistry department and served his residency in internal medicine at Barnes Hospital. While a student, resident and research fellow in St. Louis, Krebs worked under and was greatly influenced by Carl and Gerti Cori, noted biochemists who received the Nobel Prize in 1947. He held a postdoctoral fellowship in the Cori lab, which now has spawned eight Nobelists, from 1946-48.

Krebs has maintained his relationship with Washington University over the years. He is a member of the University's Eliot Society and received the University's Distinguished Alumni Award in 1972 and the medical school's Alumni Achievement Award in 1988.

He joined the University of Washington faculty in 1948 and has conducted much of his research there with colleague Edmond H. Fischer, M.D. The two shared the Nobel Prize. As a leading educator, Krebs helped form the University of Washington's medical school and has had a distinguished career there. Krebs also served for 11 years as professor and chair of the Department of Biological Chemistry at the University of California at Davis.

The Department of Cell Biology and Physiology sponsors the Erlanger-Gasser Lecture to honor Joseph Erlanger, M.D., and Herbert Gasser, M.D. Erlanger headed the Department of Physiology from 1910 to 1946. Gasser joined the department in 1916. He then served as head of the Department of Pharmacology from 1921 to 1932. Erlanger and Gasser shared the Nobel Prize in physiology or medicine in 1944 for their studies of fundamental properties of nerve cells.

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Washington

WASHINGTON UNIVERSITY IN ST. LOUIS

Washington People

Kardos' career reflects changing times

In 1965, John L. Kardos, Ph.D., assistant professor of chemical engineering, began his Washington University career teaching undergraduate chemical engineering and researching composite materials courtesy of a big grant from the Advanced Research Project Agency (ARPA). In 1994, Kardos, now the Francis F. Ahmann Professor of Chemical Engineering and department chair, is still teaching undergraduates and researching advanced composite materials courtesy of a big grant from ARPA.

Of course, it's not the same grant, and Kardos hasn't spent the past three decades here watching the gargoyles weather. What happened to the nation, the world, and Washington University from 1965 to the present in many ways is reflected in Kardos' career and the many lives of composite materials — two or more individual substances that together provide greater benefit than either alone can.

In the fall of 1965, the School of Engineering and Applied Science comprised Cupples II, Urbauer and Sever halls. Lopata, Bryan and Jolley halls were pipe dreams at best. Students that fall were tuning into the messages of Bob Dylan, the Beatles, the Byrds and the Rolling Stones, while President Lyndon B. Johnson was escalating American involvement in Vietnam to bring the increasingly unpopular war to a negotiated halt.

The earliest application for advanced composite materials, which brought Kardos to Washington University, was for military parts, particularly the wings and tails of fighter bombers. The composites are multilayered, synthetic materials containing a variety of plastics or polymers reinforced with strong fibers, such as glass or carbon. Composites have one-fifth the weight of steel for the same strength. Reduced weight means lower energy costs. This was attractive to such defense industry giants as McDonnell Douglas Corp. The composite materials would make a leaner, meaner bomber compared with aircraft at the beginning of the war, which were made primarily of aluminum and other metals like their counterparts in the Korean War and World War II.

"I came here in 1965 and immediately became part of a team working on composites," Kardos recalled in his second floor Urbauer Hall office. "There was only one problem. I knew next to nothing about composite materials."

Kardos was fresh from the Case Institute of Technology (now Case-Western Reserve University) with a doctorate in polymer science and engineering after earning a master's degree in chemical engineering from the University of Illinois in 1963, and a bachelor's degree in chemical engineering from Pennsylvania State University in 1961.

The man whose name is now nearly synonymous with composites sought out another young mechanical engineering assistant professor, Ed Wu, Ph.D., who also was on the project here and now is at the Naval Postgraduate School in California. The two engineers literally taught one another about composite materials. "Ed knew the mechanics of the materials, I understood the chemistry," said Kardos. "For five years, we'd take a few hours each week and in one-on-one sessions teach each other what we knew about composites. We learned a lot from that, and became good friends as well."

In those early Washington years, Kardos unknowingly was on the ground floor of several pacesetting trends in academia. The first was composite materials, which sparked new approaches to developing alternative materials. The second was the interdisciplinary group approach to studying a technology — Kardos worked with engineers, chemists and physicists in his efforts to build composite materials. A third was the ARPA grant itself. Proposed and secured by the then new engineering school Dean James S. McKelvey, Ph.D., now professor of chemical engineering, the grant became the prototype for university/industry collaboration. ARPA awarded seven different grants that year for experimental programs between universities and industries. Only the Washington University grant with Monsanto Co. lasted the planned seven years.

Kardos directed the Washington University Materials Research Laboratory, an outgrowth of the ARPA grant, for 20 years. The nation's first gathering of academics to study composite materials, the laboratory is a sort of long-playing Woodstock for materials scientists. In the early years, Kardos and team members concentrated on solving the ways the composites would react with each other and the chemistry and physics of the interface — the boundary that a polymer or plastic shares with carbon or glass.

"In the late '60s, the critical problem with composite materials was predicting what the mechanical properties would be," he said. "The design people had to know what sort of equations to use to predict the properties of materials, and there were problems with the interface, too. To

advanced composites, and the automobile and railroad industries looked to advanced composites for more efficiency. By 1980, the average new American automobile off the assembly line was made with about 150 pounds of reinforced plastics — composites. While one war ended, the Cold War still simmered, so there was a steady demand for defense applications. In the '80s, the defense and aerospace industry shifted emphasis from small parts to larger composite parts. The problem of making larger composites less expensively still is being addressed in 1994.

In the '70s, Kardos became interested in biomaterials. With funding from the National Institutes of Health, he and former Washington University mechanical engineering professor Milton Swanson, Ph.D., developed several machines to test heart valves and other cardiovascular materials; they worked out protocols for biomaterials testing now used in the biomedical field.

Collaborating with Washington University scientists in civil engineering, mechanical engineering and the School of Medicine, Kardos and colleagues made an artificial heart valve from unreinforced plastics (as opposed to composites, which are reinforced). The artificial heart valve has been licensed for commercial development.

"I always thought it a good idea to move advanced composite materials into the biomedical area," said Kardos. "In fact, I have a proposal now that I call 'Nose Cones to

Hip Bones.' It involves taking carbon-carbon materials used, for instance, for warhead re-entry cones, and applying them to the construction of artificial hip joints and other biomaterials."

Kardos said his early involvement with ARPA programs influenced his research outlook.

"We were always told to have a practical application for our research," he said. "The Navy monitors would ask us, 'What will this be used for? What can you do with this down the line?' I've always tried to ask myself the same questions. Doing research just for the sake of doing it is not all that rewarding for me. I've tried to avoid solving second-order problems in favor of working on things that can have major impact on current technological problems."

The current ARPA grant involves Kardos, a variety of Washington University researchers and a host of regional and national collaborators using advanced composites, once staples of the defense industry, and applying them toward improving the nation's crumbling infrastructure, especially bridges. The grant, awarded in August 1993, is a multiyear, multimillion dollar project, drawing together many research partners, including McDonnell Douglas Corp. in a 'swords to ploughshares' transformation, with advanced composites at the core. Missouri is second only to Texas in deficient bridges. With earthquakes a major concern in southeastern Missouri, stronger, lighter and more durable bridges make imminent sense. Kardos and his collaborators are working to have bridges built in Missouri with composite materials as a practical demonstration of which — traditional construction materials or composites — is the more durable construction system.

"John is an ideal collaborator, easy to communicate and share ideas with, and he has a tremendous perspective on engineering problems," said Thomas G. Harmon, Ph.D., Clifford Murphy Professor of Civil Engineering. "Many of the ideas that a number of us are working on started in conversations with John. The practical nature of his contributions to engineering show how valuable our profession is to society."

Kardos often muses over the changes of the past 30 years.

"Just look at the cyclical nature of advanced composites," he said. "The changing times can be reflected in ARPA. In 1965, they were ARPA; a few years later, they changed to DARPA, reflecting their defense initiative. In the past couple of years, they're ARPA again, symbolic of a broader involvement in advanced composites research. So, we've come full circle in that respect."

— Tony Fitzpatrick



John L. Kardos (left) and Bumrae Cho, a doctoral student in chemical engineering, examine a missile tail made of advanced composite materials in Kardos' Urbauer Hall office. Kardos holds a golf club handle also made of composites.

"What takes seconds to do today, took days then."

give an idea what a different world it was then, we had no computation power to speak of to figure equations. Of course, we had computers, but everything was done by punch cards. What takes seconds to do today, took days then."

In those early days of advanced composites, the nation and the University (as well as most universities nationwide) were in dark times over the war. There was, in Kardos' words, "a charged atmosphere, with people constantly taking sides and questioning the morality and logic of the war." ARPA, a federal research and development agency, was closely aligned with the military and in a matter of a few years would undergo a name change to Defense Advanced Research Project Agency (DARPA). Their subsequent projects were entirely defense-oriented. Still, Kardos and other researchers believed in the many potential applications for advanced composites beyond the military.

"There was a tense undercurrent on campus and especially in the School of Engineering, which was regarded as a bastion of the defense department by some," Kardos recalled. "There were occasions when the school was literally attacked by students and provocateurs from outside the University. And there were some engineering students determined to defend their turf. I can remember two occasions where we had major confrontations and faculty had to cool things down to prevent violence. Those were tough times."

Despite such a stark contrast between the '60s and the '90s, Kardos finds the Beatles and Deadhead generation and the "Beavis and Butthead" generation remarkably similar, except that today's chemical engineering students, with their early exposure to computers and more rigorous mathematics backgrounds, are better trained entering the program.

By the Vietnam War's end in 1975, fighter aircraft and NASA structures increasingly were being made with

Calendar

April 28–May 7



Exhibitions

Center of Contemporary Arts Annual Juried Exhibition. "Caje '94: America's Cultural Diversity," a print exhibit by Jeffrey Sipple. Through April 30. Sipple is an artist and director of education at Tamarind Institute, U. of Mexico, Albuquerque. Exhibit is held in collaboration with the School of Fine Arts. Center of Contemporary Arts, 524 Trinity Ave. 935-6571 or 725-6555.

"Master of Fine Arts II." Features creations by master of fine arts students. (Opening: 5-7 p.m. April 29.) Through May 8. Gallery of Art, upper gallery, Steinberg Hall. Hours: 10 a.m.-5 p.m. weekdays; 1-5 p.m. weekends. 935-5490.

"Paracelsus, Five Hundred Years." Through July 15. Glaser Gallery, School of Medicine Library. Hours: 9 a.m.-9 p.m. weekdays; 1-5 p.m. weekends. 362-7080.

"The Authenticated Word: Victorian Illustrated Books, 1820-1900." Through July 1. Olin Library, Special Collections, level five. Hours: 8:30 a.m.-5 p.m. weekdays. 935-5495.

"Core Show." Features works of first-year and sophomore art students. Sponsored by the School of Fine Arts. April 29 through May 22. Bixby Gallery, Bixby Hall. Hours: 10 a.m.-4 p.m. weekdays; 1-5 p.m. weekends. 935-6597.



Films

Thursday, April 28

7 and 9 p.m. Filmboard Foreign Series. "Pepele Moko" (1937, B&W), in French with English subtitles. Room 100 Brown Hall. Cost: \$3. For 24-hour Filmboard hotline, call 935-5983.

Friday, April 29

6, 8 and 10 p.m. Filmboard Feature Series. "Reality Bites" (1993). (Also April 30, same times, and May 1 at 6 and 8 p.m.) Room 100 Brown Hall. Cost: \$3.



Lectures

Thursday, April 28

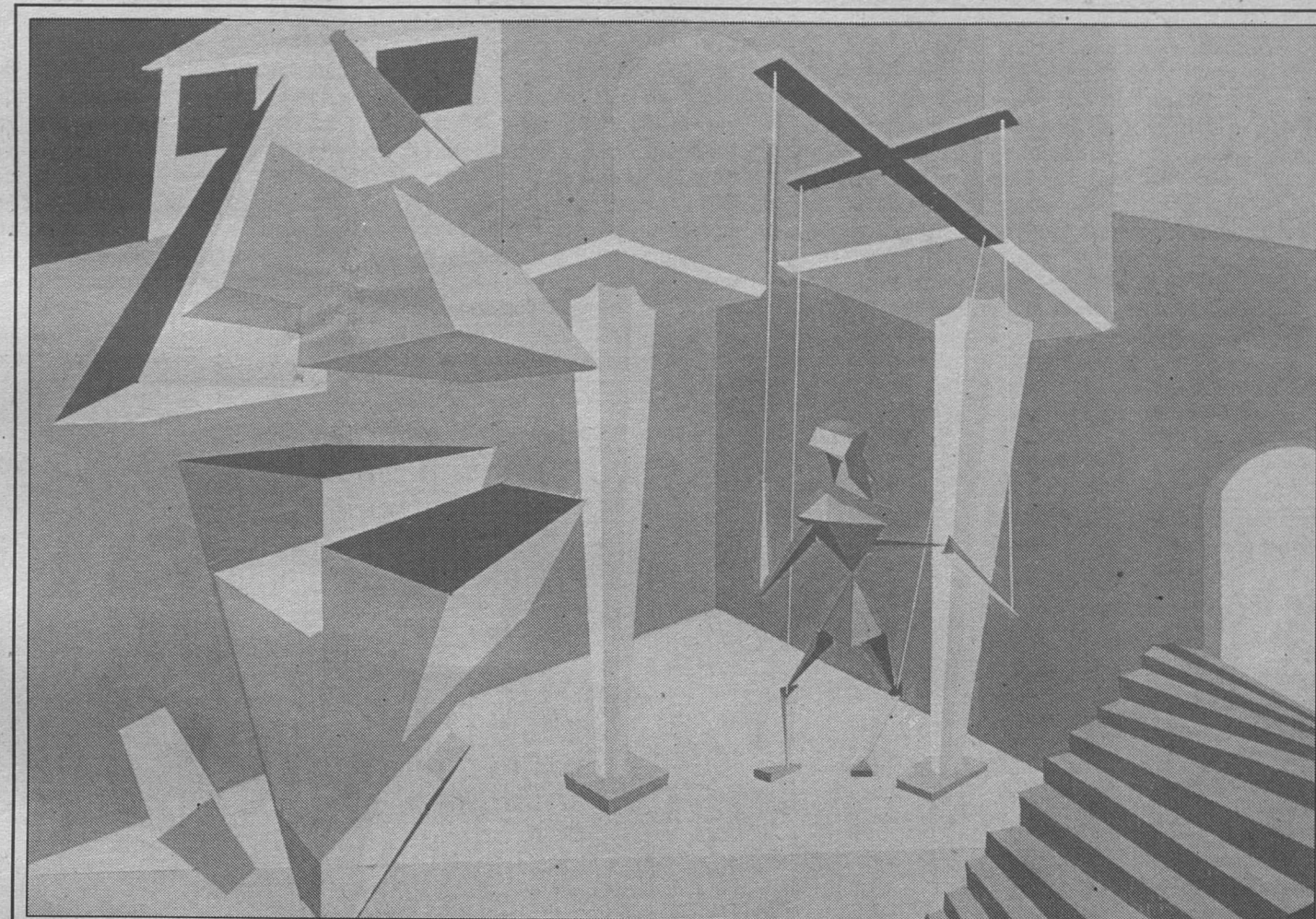
Noon. Chemistry seminar. "Chemical Games With Molecular Footballs, Darts and Paddlewheels," John G. Verkade, prof. of chemistry, Iowa State U., Ames. Room 311 McMillen Lab. 935-6530.

Noon. Genetics seminar. "Subcellular Localization of Myofilament and Cytoskeletal Proteins During *C. elegans* Embryogenesis," Robert Waterston, prof. and acting head, Dept. of Genetics and assoc. prof., Dept. of Anatomy and Neurobiology. Room 816 McDonnell Medical Sciences Bldg.

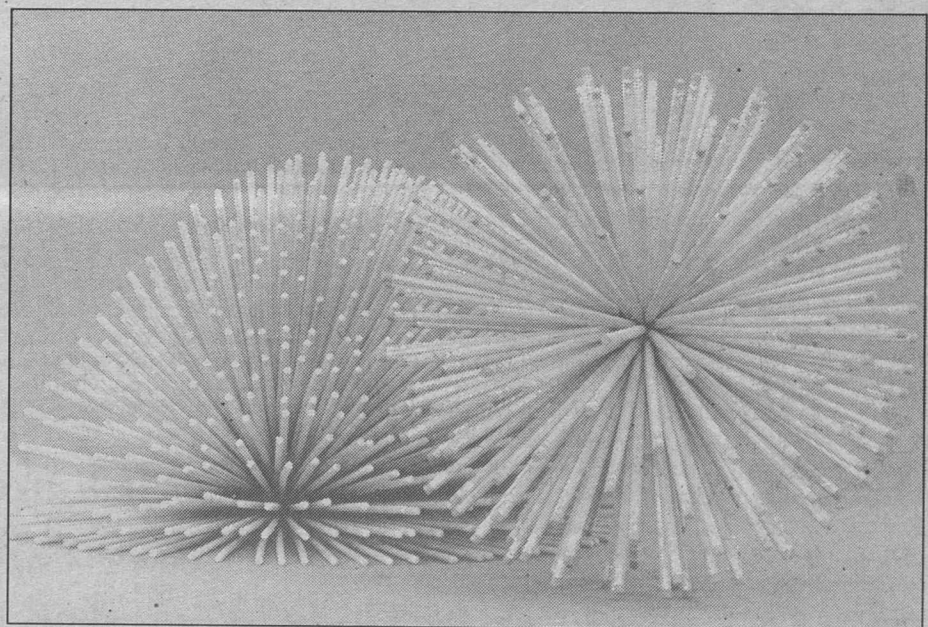
Noon. Pediatric research seminar. "Wilson's Disease," Jonathan D. Gitlin, assoc. prof., depts. of Pathology and Pediatrics. Third Floor Aud., St. Louis Children's Hospital. 454-2713.

1 p.m. Neurosciences Program thesis defense. "Interactions of Cultured Neurons With the Basal Lamina Protein S-Laminin," Brenda Porter, graduate student, Division of Biology and Biomedical Sciences. Room 928 McDonnell Medical Sciences Bldg.

4 p.m. Biology and biomedical sciences student-organized seminar. "Excitatory



These works are part of the "Core Show," which features art by first-year and sophomore art students. The annual Washington University School of Fine Arts student art exhibits will be held at various locations and dates in April and May. Student works can be purchased. "We would like to remind people that this is an affordable way to acquire unusual and unique art works at affordable prices," said Libby Reuter, assistant dean of the School of Fine Arts. For more information, call 935-6597. All of the student exhibits will be listed in the Record calendar.



Synaptic Transmission Between Hippocampal Neurons," Craig E. Jahr, Vollum Institute, Oregon Health Sciences U., Portland. Erlanger Aud., McDonnell Medical Sciences Bldg.

4 p.m. Earth and Planetary Sciences Carl Tolman Colloquium. "Regional Deep Crustal Fluid Action and Its Relation to the Exhumation of the Limpopo Granulite Terrane," Dirk van Reenen, prof., Dept. of Geology, Rand Afrikaans U., South Africa. Room 362 McDonnell Hall. 935-5610.

4 p.m. European Studies Program lecture. "The Mind and the Thinking Machine: Coping With the Ever Growing Body of Human Knowledge," Eberhard Lämmert, prof. of comparative literature, Free U. of Berlin, Germany. Room 102 Eads Hall. 935-4360.

4:15 p.m. Philosophy, Neuroscience and Psychology (PNP) colloquium. "Connectionism and Consciousness," Dan Lloyd, assoc. prof., Dept. of Philosophy, Trinity College, Hartford, Conn. Women's Bldg. Lounge. 935-6670.

4:30 p.m. Math colloquium. "Harmonic Polynomials," Sheldon Axler, prof. of mathematics, Michigan State U., East Lansing. Room 199 Cupples I Hall.

4:30 p.m. Program in Physical Therapy Fifth Annual Steven J. Rose Lectureship. "Re-examining the Mutability of Spinal Stretch Reflexes: Implications for Rehabilitation," Steven L. Wolf, prof., Dept. of Rehabilitation Medicine, and assoc. prof., Dept. of Anatomy and Cell Biology, Emory U., Atlanta. Moore Aud., 4565 McKinley Ave.

7 p.m. Assembly Series film and discussion. "Introduction to 'Gun Crazy,'" a film directed by Joseph Lewis, well-known film director from classical Hollywood. Lewis will answer

questions from the audience following a screening of his film. Shady Oak Ciné, 7630 Forsyth Blvd. Cost: \$5.50; free for undergraduates with student ID. 935-5285.

Friday, April 29

11 a.m. Assembly Series informal discussion. Hollywood film director Joseph Lewis will participate in a discussion on film. Lambert Lounge, Room 303 Mallinckrodt Center.

3 p.m. Math analysis seminar. "Sections of Power Series," Faruk Abi Khuzam, prof. of mathematics, American U. of Beirut, Lebanon, and Purdue U., West Lafayette, Ind. Room 199 Cupples I Hall. 935-6726.

4 p.m. Annual Erlanger-Gasser lecture. "Protein Phosphorylation Cascades and Growth Factor Signaling," Edwin G. Krebs, prof. emeritus, Dept. of Pharmacology, U. of Washington, Seattle, and senior investigator emeritus, Howard Hughes Medical Institute, Bethesda, Md. Sponsored by Dept. of Cell Biology and Physiology. Moore Aud., 4580 Scott Ave. 362-6950.

4 p.m. Microbial pathogenesis seminar. "Pilus Biogenesis in *Neisseria gonorrhoeae* and Expression of Related Phenotypes," Michael Koomey, asst. prof., Dept. of Microbiology and Immunology, U. of Michigan, Ann Arbor. Room 775 McDonnell Medical Sciences Bldg. (Refreshments: 3:45 p.m.)

Saturday, April 30

9 a.m. Saturday Morning Neural Sciences Seminar Series: MRN-Magnetic Resonance Neuroscience Seminar. "What's Behind Images in the Mind?" Marcus Raichle, prof., Dept. of Neurology and Neurological Surgery. Erlanger Aud., McDonnell Medical Sciences Bldg.

Monday, May 2

4 p.m. Immunology seminar. "The Theme of Shared Cytokine Receptor Subunits: Implications for X-linked Severe Combined Immunodeficiencies," Warren J. Leonard, chief, Section of Pulmonary and Molecular Immunology, National Heart, Lung and Blood Institute, National Institutes of Health, Bethesda, Md. Third Floor Aud., St. Louis Children's Hospital.

7 p.m. Molecular biophysics seminar. "Protein-catalyzed DNA Unwinding," Timothy Lohman, prof., Dept. of Biochemistry and Molecular Biophysics. Room 423 McDonnell Medical Sciences Bldg. (Dinner: 6:30 p.m.)

Wednesday, May 4

7:30 a.m. Obstetrics and Gynecology Grand Rounds. "OB/GYN Challenges for the 21st Century," John J. Sciarra, Thomas J. Watkins Professor and chair, Dept. of Obstetrics and Gynecology, Northwestern U. Medical School, Evanston, Ill. Clopton Aud., 4950 Children's Place.

4 p.m. Biochemistry and molecular biophysics seminar. "Helix Interactions in Membrane Protein Folding and Oligomerization," Donald Engelman, Dept. of Molecular Biophysics and Biochemistry, Yale U., New Haven, Conn. Cori Aud., 4565 McKinley Ave. 362-0261.

Thursday, May 5

11:15 a.m. Social work seminar. "Mental Health Service Delivery: The Managed Care Perspective," Peter A. Ambrose, director, Managed Mental Health Services, Blue Cross/Blue Shield of Missouri. Administrative Center, 1130 S. Hampton. 935-5687.

Noon. Genetics seminar. "YAC-based Physical Mapping of Human Chromosome 7," Eric

Green, asst. prof., depts. of Genetics, Medicine and Pathology. Room 816 McDonnell Medical Sciences Bldg. 362-7072.

4:30 p.m. Math colloquium. Title to be announced. Karen Smith, Purdue U., West Lafayette, Ind. Room 199 Cupples I Hall.

Friday, May 6

Noon. Cell biology and physiology seminar. "Endocytosis and Membrane Traffic," Frederick R. Maxfield, Dept. of Pathology, Columbia U. College of Physicians and Surgeons, New York City. Room 423 McDonnell Medical Sciences Bldg. 362-6950.

4:30 p.m. Math colloquium. Title to be announced. Juha Heinonen, prof. of mathematics, U. of Michigan, Ann Arbor. Room 199 Cupples I Hall. 935-6726.

6 and 8:30 p.m. WU Association Travel Lecture Series. "Eastern Europe," Charles Hartman, travelogue producer. Graham Chapel. Cost: \$4.50 at the door. 935-5212.



Performances

Thursday, April 28

8 p.m. A.E. Hotchner Student Playwriting Competition. A premiere performance of the winning play will be presented by the Performing Arts Dept. (Also April 29 and 30, same time.) Drama Studio, Room 208 Mallinckrodt Center. Cost: \$7 for the general public; \$5 for senior citizens and WU faculty and staff; and \$5 for students. 935-6543.



Music

Sunday, May 1

3 p.m. Chamber choir spring concert. Program includes the music of Hassler, Des Prez, Bruckner, plus a group of spirituals and "Jabberwocky" by Sam Pottle. Graham Chapel. 935-5581.

7 p.m. Harpsichord concert. Maryse Carlin, renowned harpsichordist and applied music instructor, will present "An Evening of Harpsichord Music of the French Baroque," featuring the music of De Chambonnières, D'Anglebert, Couperin and Forqueray. Umrath Hall Lounge. 935-5581.

7:30 p.m. University City Symphony concert. Performance features violist Emily Storch, winner of the Young Artists Competition. Storch, 16, a student at John Burroughs School, studies with David Halen, associated concert master and violinist, St. Louis Symphony Orchestra. The University City Orchestra is conducted by William Schatzkamer, prof. emeritus of music. Graham Chapel. 994-1760.

Tuesday, May 3

8 p.m. Electronic Music Class performance. "Cable Ready," directed by instructor Rich O'Donnell. Tietjens Hall. 935-5581.

Wednesday, May 4

8 p.m. Oboe and flute recital. Featured students are juniors Dedra Foote on the oboe and Naomi Kubo on the flute. Program features the music of Beethoven, Hindemith and Poulenc. Steinberg Hall Aud. 935-5581.

Thursday, May 5

8 p.m. Washington University Opera presents Giacomo Puccini's "Suor An-

gelica" and scenes from "La Bohème" and "Turandot." Led by Jolly Stewart, director, Washington University Opera and teacher of applied music. Graham Chapel. 935-5581.

Saturday, May 7

8 p.m. Early Music Ensemble concert. "Alleluia, I Heard a Voice": Sacred Music in England From Taverner to Byrd," directed by Donna M. DiGrazia, conductor, Early Music Ensemble. Concert features the music of Taverner, Weelkes, Cornysh, Sheppard, Byrd and Gibbons. Chapel of St. Timothy and St. Titus, Concordia Seminary, 801 DeMun Ave. 935-5574 or 721-5934.



Miscellany

Saturday, April 30

1 p.m. Spring festival for children. Festival includes a music program and appearances by Cinnamon the bunny and The Rabbit, an egg/candy hunt and refreshments. Sponsored by Women's Society. Stix International House. 935-4787.

Monday, May 2

2 p.m. African and Afro-American Studies Program panel discussion. "Voting for the People of South Africa." Panel includes speakers from the African and Afro-American Studies Program and guests from U. of Missouri-St. Louis and St. Louis U. Room 219 McMillan Hall. 935-5690.

7-10 p.m. Office of Continuing Education seminar. "Internal Medicine Review." The topic is hematology, with Morey Blinder, asst. prof., and instructors Rachele A. Borson and Daniel Link, from the Dept. of Medicine. Steinberg Amphitheatre, Jewish Hospital. For schedules and cost info., call 362-6893.

Tuesday, May 3

7:30 p.m. Feminist Reading Group discussion. Leila Ahmed's book, *Women and Gender in Islam: Historical Roots of a Modern Debate*, will be discussed. Hurst Lounge, Room 201 Duncker Hall. 935-5102.

Thursday, May 5

6-9 p.m. AIDS seminar. "Metropolitan HIV/AIDS Information Night: \$3.5 million in AIDS Services and How to Access Them." Sponsored by the Ryan White Consortia of St. Louis; AIDS Clinical Trials Unit, School of Medicine; AIDS Vaccine Evaluation Unit, St. Louis U. School of Medicine; and St. Louis Effort for AIDS. Learning Resource Center, St. Louis U. School of Medicine, 3554 Caroline St. To pre-register by May 1, call 367-2382.

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 Judy Ruhland at Box 1070 (or via fax: 935-4259). Submission forms are available by calling 935-4926.

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 935-4926.

Other panelists are: Sheila Clark-Ekong of the anthropology department at the University of Missouri, St. Louis; and Emmanuel Uwalaka of the political science department at St. Louis University.

Victor T. Le Vine, Ph.D., professor of political science, will serve as moderator.

The program is sponsored by the University's African and Afro-American Studies Program.

For more information, call 935-5690.

Area flood victims still need help

Harry E. Kisker, vice provost and head of the Universitywide flood committee, said volunteers are needed to help with recent flooding.

More than 20 members from various University areas met regularly late last summer to mobilize the campus community for flood relief. Kisker called a meeting last week when heavy rains again threatened surrounding areas.

Flood waters rose so quickly many residents didn't have time to prepare or sandbag. In the Valley Park and Cedar Hill areas alone, some 400 homes were damaged.

The recent floodwaters on the Meramec River were only two feet below 1982's record crest.

Unfortunately, Salvation Army workers say re-gathering the troops has been difficult, and the lack of response has been demoralizing for flood victims.

Kisker said Salvation Army volunteers cite a number of reasons for low turnout. "Many people are just burnt out on floods," Kisker said. "There is also some resentment for the flood victims who are still living there. People think, 'Why didn't they get out?'"

The University community has additional time pressures as finals draw near

and students focus on graduation and life after college. However, Kisker is hoping seniors might consider flood relief for a class project during senior week, or that departments might volunteer as part of their end-of-the-year activities.

He is concerned about how the University might continue to provide flood relief after the students leave for the summer and is looking for suggestions. Employees with their supervisors' permission still can take up to three days off to volunteer.

Individuals or groups that want to volunteer can meet at Salvation Army headquarters at I-70 and Union Boulevard in north St. Louis on Fridays and Saturdays. Transportation to the relief site and food is provided.

The Department of Psychiatry, through a grant from the McDonnell Foundation, is teaching laypeople basic counseling skills in two workshops. The program, called Project CREST (Community Resources for Education, Support and Training), gives volunteers skills to deal with flood victims. The free workshops will be conducted over the next 18 months for groups of five to 100 people. The workshops are tailored to meet the groups' needs. For information about Project CREST, call 454-8630.

For more information about flood relief activities, call Kisker at 935-4809.

Graham Chapel adds realistic touch to opera

Washington University Opera, directed by Jolly Stewart, will present a fully staged performance of Giacomo Puccini's "Suor Angelica" and scenes from his "La Bohème" and "Turandot" at 8 p.m. Thursday, May 5, in Graham Chapel. "Suor Angelica" is a one-act opera from Puccini's trio of operas titled "Il Trittico."

"Graham Chapel is the ideal setting for the opera, which is set in a 17th-century convent," Stewart said. "The chapel will add a realistic touch to the production."

The habits to be worn by the production's singers are modeled after authentic nuns' attire from 17th-century Italy.

The opera focuses on Sister Angelica, a young woman of noble blood sent to the convent for an unspecified offense. Though Angelica denies wanting anything for

herself, she desperately wishes to receive news of her family, from whom she has not heard in some time. When she finally is visited by her aunt, the princess, Angelica tells her she has not forgotten the child she bore out of wedlock and begs for news of him. Her aunt tells her he has been dead for two years, and Angelica, familiar with various herbs, poisons herself in order to join her son in heaven.

In addition to "Suor Angelica," the Washington University Opera will perform the opening scene of the fourth act from "La Bohème" and Act II (Ping, Pang, Pong) from "Turandot."

The performance, which is free and open to the public, is sponsored by the Department of Music.

For more information, call 935-5581.

Sports

Baseball

Last Week: Washington 13, Principia 1; Washington 8, Principia 4; Rose-Hulman 5, Washington 3; Washington 3, Rose-Hulman 0

This Week: 4 p.m. Tuesday, April 26, vs. McKendree College, Kelly Field; 6 p.m. Wednesday, April 27, at Maryville University

Season Record: 19-14-1

Behind the red-hot hitting of designated hitter Dane Glueck, Mountain Home, Ark., Washington won three of four games last week, to ensure a winning season. Glueck, a sophomore, batted .750 for the week (9 of 12) while driving in 11 runs. In a double-header sweep of Principia College, he went six-for-seven at the plate with a double, two triples, two home runs and nine runs batted in. Versus Rose-Hulman, Glueck helped the Bears gain a twinbill split by going two-for-two with two walks and an RBI in a 3-0 shutout of the previously nationally ranked Engineers. Sophomore pitcher Andrew Lloyd, Bloomington, Ind., tossed the shutout, his second of the season.

Earlier in the week, senior pitcher Kirt Ervin, Highland, Ill., picked up the win in the Bears' 8-4 victory over Principia, giving the right-hander his 20th career victory. He is only the fourth player in Washington history to win 20 or more games during a career.

Men and Women's Track/Field

Last Week: at University Athletic Association Championships (UAA) — Men's Finish: 4th of 8; Women's Finish: 1st (tie) of 8

This Week: Idle

In an improbable worst-to-first scenario, the Washington University women's track and field team earned a share of the UAA Outdoor Championship — just seven weeks after finishing last at the UAA indoor meet. The Bears tied meet host Emory University for top honors by charting 100 points, with Brandeis coming in a close third at 97. On the men's side, the Bears tallied 96 points, but finished fourth among the eight competing schools.

The women's team produced just one individual champion — junior Renee Foster, Peoria Heights, Ill. — but parlayed four second-place showings, six thirds, four fourths, one fifth and three sixths into a winning combination. Foster earned her victory with a :58.53 time in the 400-meter run, lowering the school record by two seconds and netting a provisional ticket to next month's NCAA Division III meet. Foster also set a Washington University record with a :26.20 clocking in the 200-meter run. Also producing school records were sophomore Julie Pearman, Desloge, Mo., who broke an 8-year-old record with a :15.80 time in the 100-meter hurdles, and the quartet of Foster, Pearman, senior Tirzah Wilson, Benton Harbor, Mich., and sophomore Anne Reisinger, Apple Valley, Minn., which clocked 4:05.19 in the 1,600-meter relay.

The men's team spawned a pair of UAA individual champions in sophomore Matt Jeans, Washington, Mo., and first-year student Jason Hudnall, Mt. Vernon, Ill. Jeans won the 110-meter high hurdles in a UAA-record time of :15.01. Hudnall, the UAA indoor pole vault champion, repeated the honor by clearing a height of 13' 7 1/4". In addition to the two first-place finishes, the Bears netted two seconds, seven thirds, one fourth, three fifths and two sixths.

Panel discussion examines South African elections

The results of the elections in South Africa, which will be held April 26-28, will be the focus of a panel discussion at 2 p.m. Monday, May 2, in Room 219 McMillan Hall. The program is free and open to the public.

The Washington University panelists are: Funso Afolayan, Ph.D., visiting assistant professor of African and Afro-American studies, and Tom Kolasa, graduate student in the political science department.

Campus encouraged to hire from within — from page 1

sity and is thrilled with her new position," said William Witbrodt, assistant controller. "Her departure has provided the opportunity to do some reorganization in the payroll department to make us more efficient."

In-placement is being facilitated by the Office of Human Resources. Juli Einspanier, assistant director of human resources, has been working with Joyce Kniepkamp, senior project leader of information systems, to enhance the computerized Personnel Hiring System. The month-old program makes it easier for department managers to see when current employees who are at risk of being displaced are qualified for open positions. Now, when managers log onto the Personnel Hiring System to fill an open position, the first screen they see lists current employee applicants. Subsequent screens show names of external applicants.

"Subsequent screens also merge current employees with external applicants so there is no place a person can look without having the current employees noted, along with their skills that might be transferable to another department," Einspanier said.

"Departments are being encouraged to give serious consideration to current employees. To me, it looks like we're seeing a lot more current employees transferring within the University because the administration is really supporting it. In some cases, filling a position is contingent upon hiring current employees whenever possible."

Employees who lose their jobs and are transferred to another job, even if it is a lower classification, will receive the same salary, said Gloria W. White, vice chancellor for human resources and affirmative action officer.

"We do not expect an employee who leaves a job involuntarily to take a decrease in salary, but the pay increases may be held until the salary catches up with the new position's grade or classification," White said.

Johnson said people have been very receptive to the concept of in-placement.

"Some managers have made hiring from within mandatory and the provost has written to the deans and asked them to give serious consideration to internal applicants. The message is out there and managers know that hiring from within is strongly encouraged," Johnson said.

Ralph Thaman, director of Facilities Planning and Management, said he was applying the concept of in-placement to his department before it became a campuswide effort.

"I feel strongly about preserving the jobs of Washington University people," Thaman said. "Recently, we found we needed a new zone manager and we were able to fill the position with a former administrative assis-

tant. It's a unique and new direction for us; a total rethinking of the supervisory role. She had had no hands-on maintenance experience but she could deal well with people. You just have to change the way you do things."

In recent meetings open to the entire University staff, Chancellor William H. Danforth stressed the need for employees to be flexible to help the University meet the challenges of the 1990s.

The Office of Human Resources is designing a new transfer application that will make it easier for current employees to transfer to other departments. Soon, everyone on campus will be able to access a complete listing of job openings through "wugopher," the University's on-line Internet service.

The In-placement Committee also is tackling the difficult issue of employee retraining.

"In a lot of cases, employees can move to new jobs at Washington University with relative ease. It may just involve learning a new computer program," Johnson said. "But other situations are not as simple. Health Service is looking for a registered nurse, which requires several years of training."

The 10-member In-placement Com-

mittee, which includes representatives of the Hilltop and Medical campuses, has been meeting bi-weekly for about four months. At each meeting, the committee looks at all the positions open on both campuses and discusses strategies for improving the in-placement process. The group also is looking at how other organizations have met this challenge. For in-placement to be successful, Johnson said, all departments must maintain accurate records of employee evaluation. And employees must be flexible and proactive.

"This is not going to guarantee anything," Johnson said. "A typical strategy when jobs change is out-placement, helping employees find new jobs in other companies. We may have to do that, but first we'd like to help people find a niche at Washington University. We don't want to lose good performers."

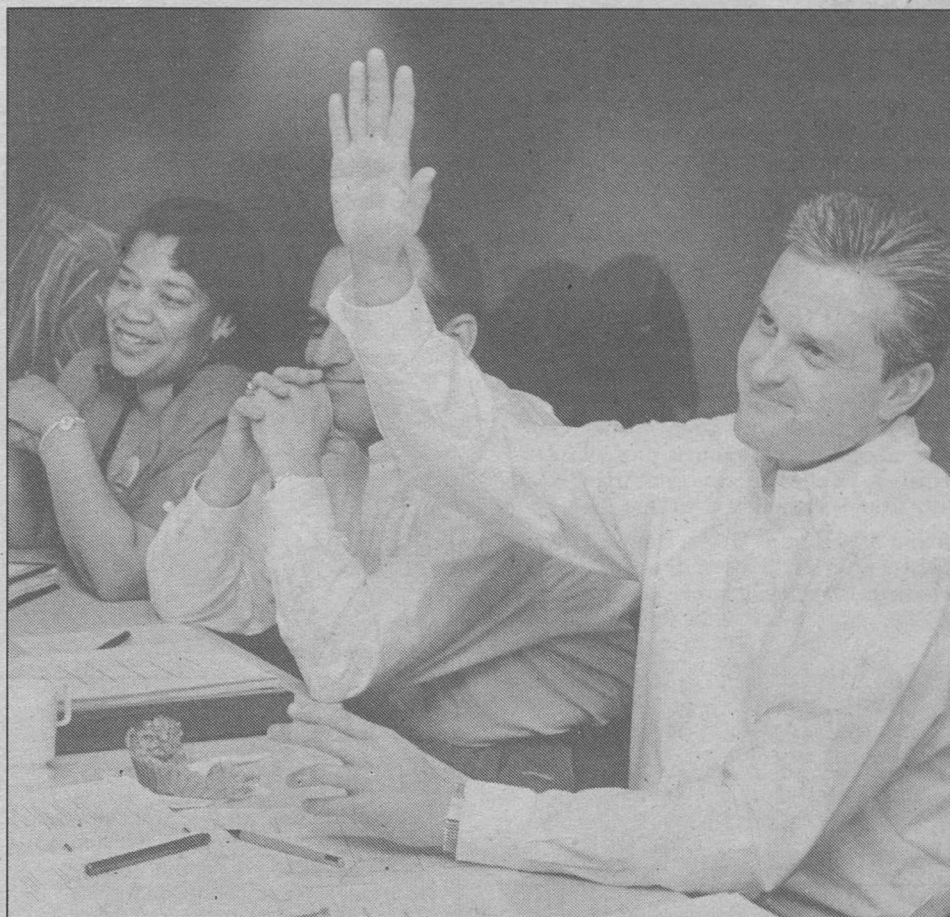
Employees who would like more information about transferring within the University should contact the Office of Human Resources at 935-5990.

Members of the In-placement Committee are: Einspanier, Thaman, Witbrodt, Karen Levin Coburn, associate dean for student development; Judith Jasper, executive director of University communications; Andrew Johnstone, business manager in the Department of Biology; David Jones, assistant vice chancellor and director of schools alumni and development programs; Judy Mahoney, director of human resources at the medical school; and Virginia Toliver, director of administration and planning at Olin Library.

— Susannah Webb

"We do not expect an employee who leaves a job involuntarily to take a decrease in salary, but the pay increases may be held until the salary catches up with the new position's grade or classification."

— Gloria W. White



Employees Marcia Hayes Harris, William Witbrodt and Larry Snyder, left to right, participate in last week's "Train the Trainer" program. This summer these and 17 other trainers will begin teaching fellow employees the principles of "Service for Success."

Employees train others this summer — from page 1

simulations, role-playing, problem-solving and case studies. Universal themes, such as cultural diversity and empowerment, will be included throughout training.

William Witbrodt, assistant controller, said the training program taught him to be a more effective communicator.

"The major thing I learned was how much more effective you can be by improving communications," Witbrodt said. "Now I feel I have a toolbox of skills to draw on to provide good service."

"Train the Trainer," which was held April 18-20 at the West Campus Conference Center, involved three intense days of training, communicating, coaching and practicing. During the sessions, the future trainers practiced facilitation skills, prepared teaching materials and presented their sessions to the rest of the team.

The trainers will begin "Service for Success" classes this summer with a limited number of University departments. In September, a general announcement will invite other employees to sign up for the program. Sessions last from 9 a.m. to noon for five days. After each session, trainers will explain how other staff members can get involved in the "Train the Trainer" program.

Larry Snyder, trainer and procedure writer in Accounting Services, said he left the training seminar feeling "energized."

"It gave me insight into tools I might use to be effective, such as better ways to communicate and handle difficult situations," Snyder said. "There is no right formula. The challenge for us is to choose the tools that work best in each situation. Not only will we be training others in these principles, but we will be modeling them, which is another challenge."

"The techniques I learned, especially for handling difficult situations, have already made my life a lot less stressful," said Karen Micich, administrative assistant in the George Warren Brown School of Social Work. "I've been doing what I've been doing for a long time and it was a good refresher; it reminded me of the importance of applying ourselves to the best of our abilities to accommodate the people we serve. The reason I'm taking the time to be a trainer is because I really believe the program can be successful. It's a morale booster, but it goes a lot deeper than that."

Classes will be composed of heterogeneous groups, crossing departmental and role boundaries, to encourage communication and cooperation between the administration, departments and schools. Criteria will be established to measure the effectiveness of the program and discussion groups for trainers will be formed to evaluate

progress and determine what is working, and what is not.

In addition to Micich, Snyder, Strimkovsky and Witbrodt, other trainers are: Cyndy Alverson, senior assistant director of admissions in the Office of Undergraduate Admission; Bernard Bennet, assistant operations manager at the Campus Bookstore; Jane Brown, manager of assets and space records in Accounting Services; William Browne, zone manager in the Department of Facilities Planning and Management; Margaret Caldwell, director of financial planning and management in the John M. Olin School of Business; Rudy Clay, librarian supervisor in the reference unit of Olin Library; Kim Elliot,

assistant director of student activities; Sandy Hall, accounting clerk in the John M. Olin School of Business; Marcia Hayes Harris, assistant director of residential life; David Jolley, school director of alumni and development programs in the Office of Alumni

and Development; Laurie Lindauer, office manager of Forsyth residence halls; Kay Nance, library technical assistant at Olin Library; Matthew Tague, manager of inventory and purchasing in the Department of Facilities Planning and Management; Ann Tegethoff, accounts payable coordinator in Accounting Services; and Catherine Wendt-Bernal, manager of The Software Library.

The "Service for Success" program is being coordinated by Tena Combs, manager of systems and procedures in Accounting Services.

— Susannah Webb

"The techniques I learned, especially for handling difficult situations, have already made my life a lot less stressful."

— Karen Micich

University participation sought in arts fund drive

Members of the University community still can give to the Arts and Education Council (A&E) of Greater St. Louis fund drive. The annual A&E drive, which began last month, raises funds for the more than 150 arts, cultural and arts education organizations in the bi-state area.

So far this year contributions from Washington University faculty and staff have totaled almost \$20,000. The University's goal is \$30,000.

For more information or a new pledge card, call Sue Mack at 935-5678. Pledges will be accepted through June.

Donors of \$25 or more will receive the A&E quarterly newsletter. This newsletter is an up-to-date listing of special events and information for members only. Donors of \$40 or more will receive an A&E card that entitles them to many half-price and two-for-one discounts for many cultural activities listed in the newsletter.

Campus Watch

The following incidents were reported to the Hilltop Campus Police Department April 18-24. Readers with information that could assist the investigation of these incidents are urged to call 935-5555. This list is provided as a public service to promote campus safety.

April 20

12:47 p.m. — A student's organizer was reported stolen from the second floor of Givens Hall sometime between 9:50 and 10:05 a.m. April 17.

1:50 p.m. — A sound speaker belonging to the University was reported stolen from Graham Chapel sometime between 12:15 p.m. April 10 and 9 a.m. April 20.

April 21

1:41 a.m. — A student's stereo and a student's mountain bicycle were reported stolen from the first floor of Shanedling Residence Hall at 1:39 a.m.

9:08 p.m. — Two hubcaps were reported stolen from a vehicle in the parking lot adjacent to the tennis courts sometime between 8 and 9:30 p.m. April 10.

April 22

7:30 p.m. — A student's backpack was

reported stolen from the hallway by the racquetball courts in the Athletic Complex sometime between 6:30 and 6:45 p.m.

April 23

11:20 a.m. — A microwave oven and a couch belonging to the Department of Psychology were reported stolen from Room 218 Eads Hall sometime between April 22 and 11:20 a.m. April 23.

April 24

10:24 a.m. — A student's mountain bicycle was reported stolen from a bicycle rack on the northeast side of Koenig Residence Hall sometime between 6 p.m. April 23 and 10:20 a.m. April 24.

12:19 p.m. — A student's mountain bicycle was reported stolen from the bicycle rack on the south side of Shepley Residence Hall sometime between 10 p.m. April 23 and noon April 24.

For The Record

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

Of note

Engin D. Akarli, Ph.D., associate professor of history, received a \$2,000 grant from the American Research Institute in Turkey and a \$1,000 grant from the Institute of Turkish Studies Inc. for his project on "The Reign of Abdulhamid II, 1876-1909." He will conduct research in the Ottoman Archives in Istanbul, Turkey, this summer. ...

The **Gallery of Art's** exhibition catalog titled "The Columbus of the Woods" has been nominated for the Charles C. Eldredge Prize for Scholarship in American Art, which is awarded by the Smithsonian Institute's National Museum of American Art. The catalog also has been nominated for the George Wittenborn Memorial Book Prize presented by the College Art Association. The University's **publications division** in the Office of Public Affairs designed the catalog. ...

David M. Jaffe, M.D., associate professor of pediatrics, received a \$285,676 grant from the Health Resources and Services Administration Maternal and Child Health Bureau for a project titled "Methodology of Eval/Reduction of Pain and Distress." ...

Mitchell Levy, a graduate student in architecture, was awarded the Premier Prix d'Architecture from the Ecole d'Art Americaine Palais Fontainebleau-Ecole des Beaux Arts of France (The American School at the Palace of Fontainebleau of the Beaux-Arts School of France). Levy's prize is a Paris apartment and a one-year stipend. He was honored for his work during the eight-week summer program in Fontainebleau. He will serve as assistant director of the program while in Paris this summer. ...

Michael I. Miller, Ph.D., professor of biomedical computing and of biomedical engineering, received a \$410,301 three-year grant from the National Institute on Deafness and Other Communication Disorders for a project on "Models of Synaptic Transduction and Neural Discharge." ...

Samuel Moyn, a senior history and French major, has been named a 1994 Andrew W. Mellon Fellow in Humanistic

Studies by The Woodrow Wilson National Fellowship Foundation of Princeton, N.J. As one of 85 winners, he will receive a \$12,750 stipend for the 1994-95 academic year. The program also covers tuition and fees. Moyn will study modern history in a graduate program at the University of California, Berkeley, this fall. ...

The **Performing Arts Department** was the first university program to participate in the Seattle Fringe Festival. The department's production of "Bad Blood" by Argentinean Griselda Gambaro was performed four times before full and enthusiastic audiences. **Richard Kuykendall**, technical director in performing arts, served as technical director of the production as well and **Annamaria Pileggi**, artist-in-residence in performing arts, was director. **Henry I. Schvey**, Ph.D., professor of drama and comparative literature and chair of performing arts, coordinated the department's participation. The student performers in the play included juniors **David Baecker** and **Deena Robinson**, first-year student **Benjamin Crabtree**, sophomores **Alexander Gish** and **Jeffrey Pagliano**, and senior **Roell Schmidt**. The designers for the production were seniors **Kimberly Banks** and **Brian Baskin**, and sophomores **Emily Wells** and **Sibyl Wickersheimer**. ...

Marilyn J. Siegel, M.D., professor of radiology at the School of Medicine's Mallinckrodt Institute of Radiology and associate professor of pediatrics, received a \$249,728 three-year grant from the National Cancer Institute for a project titled "Radiologic Diagnostic Oncology Group IV — Pediatric Solid Tumors." ...

Ben Woods, chemistry library assistant, was acknowledged for his scholarly contributions in a dissertation by Luzviminda Tinao Wooldridge, Ph.D., a 1993 graduate in chemistry. Wooldridge's dissertation, which is housed in Olin and the chemistry libraries, is titled "The Use of Bis Enol Ethers in Anodic Olefin Coupling Reactions." ...

V. Leroy Young, M.D., professor of surgery (plastic and reconstructive), received a \$7,660 grant from The American Society for Aesthetic Plastic Surgery Inc. for a project on "Outcome of Microbial Contamination of the Saline in Breast Implants."

Epsilon (3.34 gpa, fall 1993); Order of Omega Scholarship Award Highest Overall GPA to Zeta Beta Tau (3.30 gpa, fall 1993); Jeffrey P. Rodman Interfraternity Council Service Award to junior Howard Olson, a member of Phi Delta Theta;

Brett Marlowe Memorial Outstanding Chapter President Award to junior Andrew Ruben of Sigma Alpha Mu; George E. Kassabaum Outstanding Senior Award to Benjamin Light of Sigma Alpha Epsilon; Maurice Chambers Community Service Award and the Mildred Chambers Chapter Advancement Award to Phi Beta Sigma; and the Chapter Excellence Award to Sigma Alpha Epsilon.

The Women's Panhellenic Association presented the following awards: the Award of Excellence to Cathy Earley, coordinator of Greek affairs; Order of Omega Scholarship Award Highest GPA-New Members to Kappa Alpha Theta (2.9 gpa, fall 1993); Order of Omega Scholarship Award Highest Overall GPA to Alpha Epsilon Phi (3.3 gpa, fall 1993); Outstanding Panhellenic Delegate Award to senior Julie Kovarik of Delta Gamma;

Philanthropy Award to Kappa Alpha Theta; Greeks Advocating the Mature Management of Alcohol Award to Alpha Phi; Programming Award to Alpha Phi and Kappa Alpha Theta; Panhellenic Pride Award to Alpha Epsilon Phi; Kay Roh Memorial Award to sophomore Alecia Riewerts of Kappa Kappa Gamma; Women's Advocate Award to senior Glenna Chang of Alpha Phi; and Outstanding Greek Woman Award to senior Patricia Wu of Kappa Kappa Gamma.

Speaking of

Li-Chen Cheng, a doctoral student at the George Warren Brown School of Social Work, and **Mark Rank**, Ph.D., associate professor of social work, presented a paper on "The Dynamics and Determinants of Intergenerational Welfare Use" at the Midwest Sociological Society meeting held in St. Louis. Rank also presented "Social Class Versus Cultural Explanations of Intergenerational Welfare Use" during a faculty research forum held at Cornell University in Ithaca, N.Y. ...

At the American Association for Italian Studies 14th annual convention held in Madison, Wis., **Anita M. Olan**, a graduate student in comparative literature, delivered a paper on "Re-conceiving Eve: Woman as Culpit in Fascist Italy." ...

Robert D. Tucker, Ph.D., assistant professor of earth and planetary sciences, delivered a lecture on "Resolving the Fourth Dimension: High-precision Dating of Tiny Bits of Time" as part of a colloquium series held at Harvard University in Cambridge, Mass. The series was sponsored by the university's Department of Earth and Planetary Sciences.

On assignment

Ronald G. Evens, M.D., director of the School of Medicine's Mallinckrodt Institute of Radiology, was elected vice-chair of the American College of Radiology's board of chancellors. Evens, a fellow of the college, will assume his duties as vice-chair in September.

Students endure five-hour battle at international computer contest

A student team recently placed fourth in a unique computing contest hosted by the Association for Computing Machinery (ACM). The competition was held in Phoenix.

The ACM International Collegiate Programming Contest was sponsored by Microsoft Corp. and pitted teams from American, European, Canadian and Pacific Rim universities in a five-hour battle of logic and mental endurance.

The competitors worked in a networked environment at the Phoenix Civic Plaza Convention Center. They relied on creativity as much as skill at the computer keyboard to perform such tasks as: simulating a defensive missile interception system; determining the least expensive collection of packages that satisfy a customer's request; deciding the best order for showing programs on a cable television channel; setting type using various fonts; and simulating a traffic advisory system for ships in a port. Each team was ranked by time and fewest mistakes.

The Washington University team

To press

Richard W. Brand, D.D.S., assistant dean for admissions and student affairs at the School of Medicine and professor of biomedical sciences, had the fifth edition of his book, *Anatomy of Orofacial Structures*, published by Mosby-Year Book Inc. in St. Louis. Brand wrote the book with Donald Isselhard, D.D.S., who has a private dental practice in St. Louis. ...

John C. Morris, M.D., associate professor of neurology and director of the Memory and Aging Project, has been appointed to the editorial board of *The Neurologist*, a new journal to be published in 1995 by Williams and Wilkins of Baltimore. ...

A poem written by **Carl Phillips**, poet-in-residence in English and in African and Afro-American studies, has been selected to appear in the anthology *Best American Poetry 1994*, which will be published by Scribner/Collins of New York in the fall. The poem, "A Mathematics of Breathing," also appears in the 1994 anthology *On the Verge: Emerging Poets and Artists* published by Agni, a Boston literary journal.

Guidelines for submitting copy:

Send your full name, complete title, department, phone number and highest-earned degree, along with a typed description of your noteworthy activity to For The Record, c/o Carolyn Sanford, Campus Box 1070, or p72245cs@wuvmd.wustl.edu. Items must not exceed 75 words. For information, call Sanford at 935-5293.

Many honored at first Greek awards reception

Numerous students, faculty and staff members were honored recently during the 1994 Maurice Chambers/Adele Starbird Greek Awards Reception held in Holmes Lounge.

The first annual Greek awards reception was held to honor those who have excelled in academics and campus, community and Greek activities.

The Interfraternity Council presented the following honors: Teaching Excellence Award to Wayne Fields, Ph.D., professor of English and dean of University College; Order of Omega Scholarship Award Highest Grade Point Average (GPA)-New Members to Tau Kappa

Introducing new faculty members

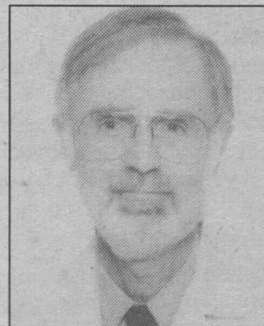
The Record is running a series profiling new faculty on the Hilltop and Medical campuses.

Talal Chatila, M.D., associate professor of pediatrics, comes from Harvard Medical School in Cambridge, Mass., where he was an assistant professor of pediatrics. He has been appointed with tenure. His research focuses on primary immune deficiency and lymphocyte activation. He received a bachelor's degree in science in 1979, a master's degree in science in 1981, and a medical degree in 1984, all from the American University of Beirut in Lebanon.

Campus Authors

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

Images of Mind is the title of a new book by **Marcus E. Raichle**, M.D., professor of neurology and of radiology. He wrote the book with Michael I. Posner, professor of psychology and director of the Institute of Cognitive and Decision Sciences at the University of Oregon in Eugene. Scientists continue to try to pinpoint the physical mechanisms of the brain involved in perception, learning, memory and other higher cognitive functions. Now they have at their command some remarkable investigative tools — including imaging technologies (primarily positron emission tomography, or PET) that are able to take pictures of the brain in action, rendering certain aspects of thought visible as they occur. By allowing scientists to see the physical changes brought on by mental activity, these technologies are helping to reveal the connections between different parts of the brain and specific functions of the mind. *Images of Mind* is a lavish showcase for PET, other brain imaging techniques and the emerging field of cognitive neuroscience. (W. H. Freeman and Co., New York, N.Y.)



Marcus E. Raichle

Opportunities & personnel news

Hilltop Campus

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, Room 126 North Brookings Hall, or by calling 935-5990. Note: All positions require three letters of recommendation.

RN/LPN

940160. *Health Service*. Requirements: Registered nurse and/or licensed practical nurse for weekend infirmity duties. Schedule: (32 weekends) fall and spring semesters; may be eight or 12 hours from 7:30 a.m. Saturdays to 7:30 a.m. Sundays. Application and resume required.

Administrative Assistant

940175. *George Warren Brown School of Social Work*. Requirements: Some college; typing 45 wpm with accuracy; personal computer proficiency, including word processing and spreadsheets; understanding of funding guidelines that apply to the preparation of proposals; ability to coordinate, write and proofread; above average knowledge of English grammar and spelling; self-study reaccreditation work. Clerical tests required.

Secretary

940176. *University College*. Requirements: Some college, associate's degree preferred; typing 50 wpm with accuracy; ability to handle multiple tasks and establish priorities under pressure; ability to meet public in a pleasant and professional manner; stamina; ability to hand deliver correspondence and packages across campus. Clerical tests required.

Counselor or Psychologist

940186. *Student Counseling Service*. Requirements: Advanced professional clinical training and skill in psychology, counseling or social work; ability to provide treatment and outreach services to university students; experience and skill with students from minority backgrounds and/or with men's issues highly desirable. Resume required.

Counselor or Psychologist, Part-time

940190. *Student Counseling Service*. Requirements: Advanced professional clinical training and skill in psychology, counseling or social work; ability to provide treatment and outreach services to university students; experience and skill with students from minority backgrounds and/or men's issues highly desirable. Resume required.

Senior Project Leader

940192. *Computing and Communications*. Requirements: Some college; five years data processing experience; proven ability to design, program and install major data processing systems; proven ability to lead others in data processing projects development; proven ability to design, write and install MANTIS or FOCUS systems. Resume required.

Admission Counselor

940194. *Undergraduate Admission*. Requirements: Bachelor's degree, a recent Washington University graduate is strongly desired; availability for a great deal of evening and weekend work; flexible, team-oriented, well organized, with a sense of humor. Responsibilities include: recruitment travel, application evaluation, working with alumni and parents admission program and other responsibilities as assigned. This entry level position carries a two-year appointment. Resume required.

Mechanic (HVAC)

940195. *Facilities Planning and Management*. Requirements: High school education; formal training in air conditioning, heating and refrigeration work from a qualified technical school, plus five years experience as a heating, air conditioning and refrigeration mechanic; comprehensive training in instrumentation and controls;

proficiency in trouble-shooting and systems analysis; proven ability to work from blueprints, drawings and sketches, and perform duties and responsibilities; knowledge of thermodynamic characteristics of refrigerants, heat transfer of air and water; certification for reclaiming refrigerants; must furnish own hand tools; willingness to work overtime at night and on days off when called upon for emergencies; must follow all safety rules. Application required.

Area Coordinator-Residence Halls

940215. *Residential Life*. Requirements: Master's degree in higher education or related field and residence hall experience; responsible individual who wants immediate experience with program design, development and implementation in an energetic, student-oriented organization; personal initiative, creativity, enthusiasm for student services and a strong commitment to team-oriented process highly desired. This is a live-in position. Resume required.

Seismic Data Entry Assistant

940221. *Earth and Planetary Sciences*. Requirements: Some college, bachelor's degree preferred; experience handling seismic data preferred; experience with data entry and automatic data processing desirable; accuracy in transcribing numerical information; ability to learn computerized data entry and analysis procedures required. Resume required.

Supervisor-Scientific Computing

940222. *Physics*. Requirements: Master's degree, doctorate preferred; ability to supervise professional computer personnel, hardware personnel, systems analyst; experience working in large-scale computing; ability to support software on multiple platforms; experience with C, UNIX and FORTRAN; experience with graphics for multiple platforms; personal computer/Macintosh networking experience preferred. Resume required.

Financial Manager

940223. *University College*. Requirements: Bachelor's degree; typing 40 wpm with accuracy; familiarity with university accounting systems preferred; ability to handle several activities under pressure; accuracy and timeliness essential; personal and telephone communication skills; attentiveness to detail. Clerical tests required.

Department Secretary

940227. *Major Gifts*. Requirements: Associate's degree or equivalent knowledge; specialized secretarial and business training; attentiveness to detail; three years general office experience; good command of English; must be alert and well-spoken; ability to deal with multiple priorities; maturity, well-groomed, pleasant personality; ability to relate easily to people; typing 50 wpm with accuracy. Clerical tests required.

PC Systems Manager

940228. *Engineering Accounting*. Requirements: Bachelor's degree; should demonstrate a high level of skill in debugging and troubleshooting system setup and software installation problems; experience with Macintosh, DOS, Windows and UNIX; familiarity with networks and network operating systems and some programming experience in a structured language preferred; good personal communication skills. Resume required.

Interlibrary Loan Borrowing Assistant

940229. *Olin Library*. Requirements: Four years of college or equivalent experience, degree preferred; library experience desirable; ability to communicate orally and in writing with the public in a pleasant businesslike manner; ability to perform clerical tasks quickly and accurately; bibliographic skills and familiarity with foreign languages desirable; experience with the OCLC terminal helpful; ability to work under pressure; physical stamina; typing 35 wpm with accuracy. Clerical tests required.

Research Technician

940230. *Biology*. Requirements: Bachelor's degree in biological sciences; conscientious, meticulous and careful. Responsibilities: Conducting research at the bench; note-keeping and maintenance of lab records and strain collections. Resume required.

System Administrator

940233. *Engineering Computer Lab*. Requirements: Bachelor's degree; experience with TCP/IP and Appletalk networks desired; experience in both BSD and SYS VRY versions of UNIX preferred. Resume required.

Stock Clerk

940238. *Campus Stores*. Requirements: High school graduate; good physical condition for recurrent lifting of moderately heavy items; typing; excellent attendance record, outstanding customer-service attitude; ability to work evenings and Saturdays (10:30 a.m. to 7 p.m. Mondays-Thursdays and 10 a.m. to 4 p.m. Saturdays); retail experience desirable. Clerical tests required.

Assistant Law Librarian-Cataloging and Serials

Freund Law Library. Requirements: Master's degree in library science from an ALA-accredited institution; five years professional experience in technical services in a law library; management and supervisory experience; knowledge of automated systems, INNOPAC experience preferred; flexibility. Duties: Manage all aspects of technical services, including cataloging, serials, and the mail. Salary is competitive and commensurate with qualifications and experience. Position is available in June 1994. Inquiries and resumes should be sent to: Faye L. Couture, associate director, Freund Law Library, Campus Box 1171, Washington University School of Law, One Brookings Drive, St. Louis, Mo., 63130-4899.

Medical Campus

The following is a partial list of positions available at the School of Medicine. Employees who are interested in submitting a transfer request should contact the Human Resources Department of the medical school at 362-4920 to request an application. External candidates may call 362-7195 for information regarding application procedures or may submit a resume to the Human Resources office located at 4480 Clayton Ave., Campus Box 8002, St. Louis, Mo., 63110. Please note that the medical school does not disclose salary information for vacancies, and the office strongly discourages inquiries to departments other than Human Resources.

Medical Research Technician

940655-R. *Anatomy and Neurobiology*. Requirements: Bachelor's degree with strong background in molecular biology, cell biology or neurobiology; responsible, self-motivated with ability to work independently under guidelines from supervisor; working knowledge of genetics and molecular (DNA) techniques preferred. Resume required.

Executive Director, Billing and Collections

940680-R. *Administration*. Requirements: Bachelor's degree, preferably with an emphasis in business, finance or related field, MBA or MHA; seven to 10 years experience in large faculty, private practice or large healthcare facility; emphasis on management of patient accounts, budgeting and third-party reimbursement; good human relations and interpersonal skills.

Statistical Data Analyst

940739-R. *Psychiatry*. Requirements: Bachelor's degree with three to five years experience; knowledge of C language, Quick Basic and WordPerfect, knowledge of Harvard Graphics highly desirable. Responsibilities include programming and analyzing

large data sets using SAS on SUN (UNIX) and personal computer (DOS).

Secretary I

940740-R. *Student Affairs*. Requirements: High school graduate or equivalent, some college course work preferred; good verbal and numerical aptitude; precise attention to details and deadlines; typing 45 wpm with knowledge of Microsoft Word and WordPerfect highly preferred. Responsibilities include efficient and timely processing of financial aid applications, preparation of loan applications and associated loan documents, and disbursement of financial aid funds.

Medical Research Technician

940741-R. *Pediatrics*. Requirements: Bachelor's degree with background in cell biology and/or biochemistry; ability to work independently under guidelines from supervisor; knowledge of tissue culture, protein purification and DNA analysis.

Administrative Coordinator

940744-R. *Internal Medicine*. Requirements: Bachelor's degree; three to five years related experience preferred; ability to organize and administer business affairs; supervisory experience preferred; accounting and computer literacy; familiarity with university systems highly preferred. Responsibilities: Assist in day-to-day operations of a division; providing necessary support in coordinating a variety of administrative functions, including financial accounting and program planning activities.

Secretary Receptionist

940762-R. *Biotechnology Center*. Schedule: Part-time (20 hours per week), 10 a.m.-2 p.m. Mondays through Fridays. Requirements: High school graduate or equivalent; typing 50 wpm; word processing experience preferred; experience using FIS system.

Social Worker MSW

940777-R. *Allergy and Immunology*. Requirements: Master's degree in social work; two years case management experience; experience working with inner-city children and their families; experience working with asthma patients, preferably children, desired.

Associate Director of Internal Operations

940788-R. *Administration*. Requirements: Bachelor's degree, preferably in business or finance-related field, advanced degree desired; five years related experience, including supervisory responsibility; knowledge of physicians' professional fee billing practices and principles, third-party payment procedures, regulations and medical collection techniques and policies; experience in a multispecialty group practice with emphasis on professional fee management and regulatory provisions preferred; knowledge of IDX desirable.

Associate Director of Departmental Support Service

940789-R. *Administration*. Requirements: Bachelor's degree, preferably in business or finance-related field, advanced degree desired; five years related experience, including supervisory responsibility; experience in multispecialty group practice with emphasis on professional fee management; regulatory provision and third-party payment for physician services; knowledge of IDX desirable.

Associate Director of Information Systems

940790-R. *Administration*. Requirements: Bachelor's degree in information system-related field, advanced degree desired; five years experience in information systems specific to group practice environment; direct experience managing diverse staff in complex environment; knowledge of computer system applications and hardware that support ambulatory or business operations; knowledge of IDX.