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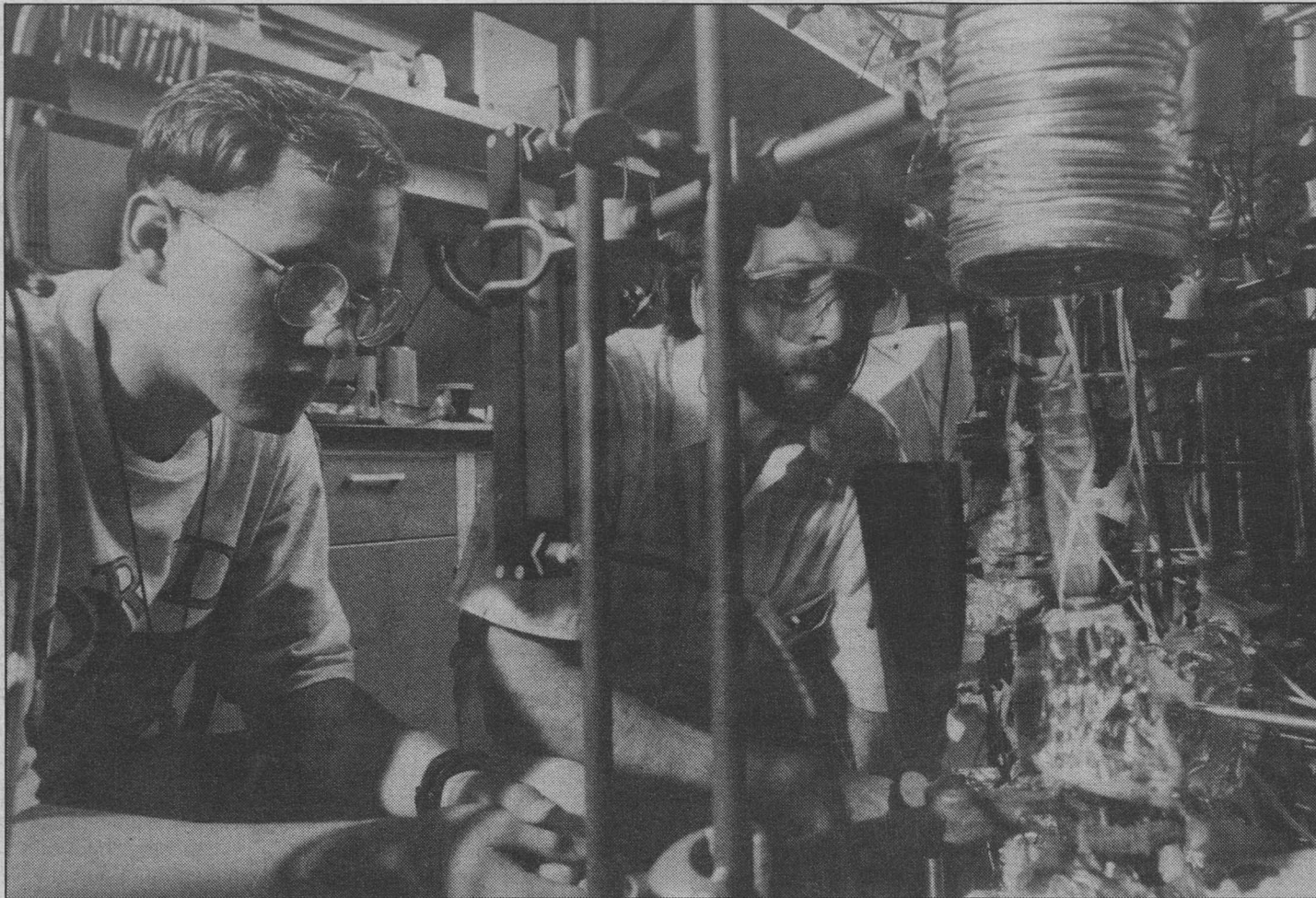
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# Record

WASHINGTON  
UNIVERSITY  
IN ST. LOUIS

Vol. 17 No. 34 August 5, 1993



Richard Axelbaum (right), Ph.D., assistant professor of mechanical engineering, conducts combustion and energy research with Chris Perrey, a student at Francis-Howell North High School. Axelbaum is one of several Washington University researchers donating time this summer to the George Engelmann Mathematics and Science Institute. The institute encourages bright young people to pursue careers in science, math and technology by pairing them with University scientists to work on intensive research problems.

## One-on-one

### Faculty volunteer as mentors, show gifted students world of research

Damon Vincent didn't finish high school — not because he was struggling academically, but because he wasn't being challenged enough.

Today, Vincent is a junior majoring in chemical engineering and biology at Washington University. He credits the George Engelmann Mathematics and Science Institute, not only with bringing him to the University, but also for redefining his life direction.

As a high school student, Vincent participated in two institute programs — Engelmann I and II — in the summers after his sophomore and junior years. The experience awakened him to challenges that he wasn't finding in high school and, at the end of his junior year, he decided to aim for college instead.

The Engelmann institute encourages bright young people to pursue careers in science, math and technology. Founded by the University of Missouri-St. Louis (UM-St. Louis) in 1988, the institute now includes volunteer efforts of Washington University and St. Louis University faculty as well. George Engelmann, a brilliant 19th-century scientific scholar and physician and the scientific father of the Missouri Botanical Garden, serves as the inspiration for the institute.

Engelmann I, the summer Science Scholar Program, involves four weeks of intensive study for 50 junior or senior high

school students in the upper 5 percent of their class. The program draws from 106 area high schools in St. Louis City and St. Louis, St. Charles, Jefferson, Phelps and Warren counties.

Engelmann I students are exposed to all of the major scientific disciplines through advanced traditional lab work, lectures and field trips. Once they complete the program, the students are named Engelmann scholars.

Engelmann II, the Scholar Research Program, gives Engelmann scholars and graduates of the Missouri Scholar Academy Program the opportunity to do research projects in astronomy, biology, chemistry, earth science, engineering, mathematics, physics or psychology. The high school students work one-on-one with a mentor scientist during the six-week program.

These students work in the labs of Washington University, UM-St. Louis and St. Louis University faculty members. The students visit the labs of all three campuses and get a chance to see the equipment used. Throughout the process the students share their work with one another. At the end of six weeks, the students convene and present a formal research paper to each other and to the faculty. Upon completion, they are commended National Science Foundation Young Scholars.

Vincent said the Engelmann programs introduced him to a peer group that wasn't available at his high school. Suddenly, he realized he wasn't alone in his interests.

"There was this incredible mindshare there. The greatest learning happens between students. Ideas grow, the bad ones are weeded out, the good ideas get stronger," he said.

But even more importantly, Engelmann made him want to reach for greater heights. "It made me want to challenge myself. I realized I was capable of doing more than I was asking of myself. I went back to high school after Engelmann, but the academic challenges I had put before myself weren't available at high school," he said.

"I dropped out of high school. I didn't even get a GED," he said. By this time, Vincent had developed a strong interest in research. "I was always interested in science, but after Engelmann, I was sure that research was what I wanted to do."

"My good experiences at Engelmann

*Continued on page 5*

## Institute spotlights Harlem Renaissance

If members of the National Alliance of Black School Educators (NABSE) have their way, youths everywhere will know the significance of the Harlem Renaissance in African-American culture.

To increase awareness about the Harlem Renaissance, NABSE recently sponsored a three-week institute at Wohl Center for 35 principals, teachers, curriculum developers and others from schools across the country. The institute, the first of its kind devoted to the period, was titled "The African-American Roots of American Culture: The Harlem Renaissance." The institute participants stayed in the Park House residence hall.

Scholars define the Harlem Renaissance as the first attempt by African-Americans to

## Professor receives \$29.7 million grant for genome project

Robert H. Waterston, M.D., Ph.D., acting chairman and professor of genetics at the School of Medicine, has received a \$29.7 million grant to continue his work in the human genome project.

The five-year award comes from the National Institutes of Health's Center for Human Genome Research. Waterston, who also is an associate professor of anatomy and neurobiology, has played a leading role in the human genome project, which seeks to decipher the genetic makeup of humans and a handful of more basic organisms.

The genome project will dramatically improve scientists' understanding of inherited diseases and help identify individuals at risk for inheriting genes that may predispose them to disease. The grant to Waterston will enable him to complete his project to sequence, or spell

out, all 100 million chemical bases that determine the genetic blueprint of the *C. elegans* nematode, a tiny transparent worm.

The nematode project is a model for the larger effort to map and sequence the entire human genome. Waterston's laboratory is collaborating with scientists John Sulston and Alan Coulson at the Medical Research Council Laboratory of Molecular Biology in Cambridge, England. Washington University scientists working with Waterston on the project include Richard Wilson, Ph.D., LaDeana Hillier, Philip Green, Ph.D., Mark Johnston, Ph.D., Eric Green, M.D., Ph.D., and Mark Vaudin, Ph.D.

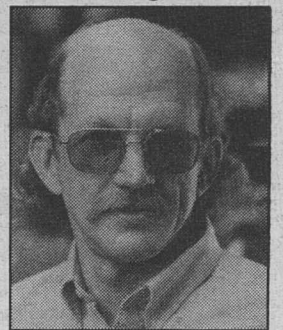
The grant also will allow Waterston and his co-workers to contribute to completing the genetic sequence of the yeast *S. cerevisiae*.

"There's a great deal of similarity in the genes of humans and yeast and genes of humans and nematodes," Waterston says. "In many cases, it has proven valuable to learn about the function of human genes through the study of the equivalent genes in nematodes or yeast. Understanding the biology of these organisms will also lead to better comprehension of human biology."

Waterston's laboratory also will initiate a project to sequence the DNA in human genes. Initially, researchers will focus on a region of chromosome 16, which harbors the gene for polycystic kidney disease.

Finally, the grant will allow Waterston to develop software and automation procedures to speed DNA sequencing. Currently,

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Robert H. Waterston

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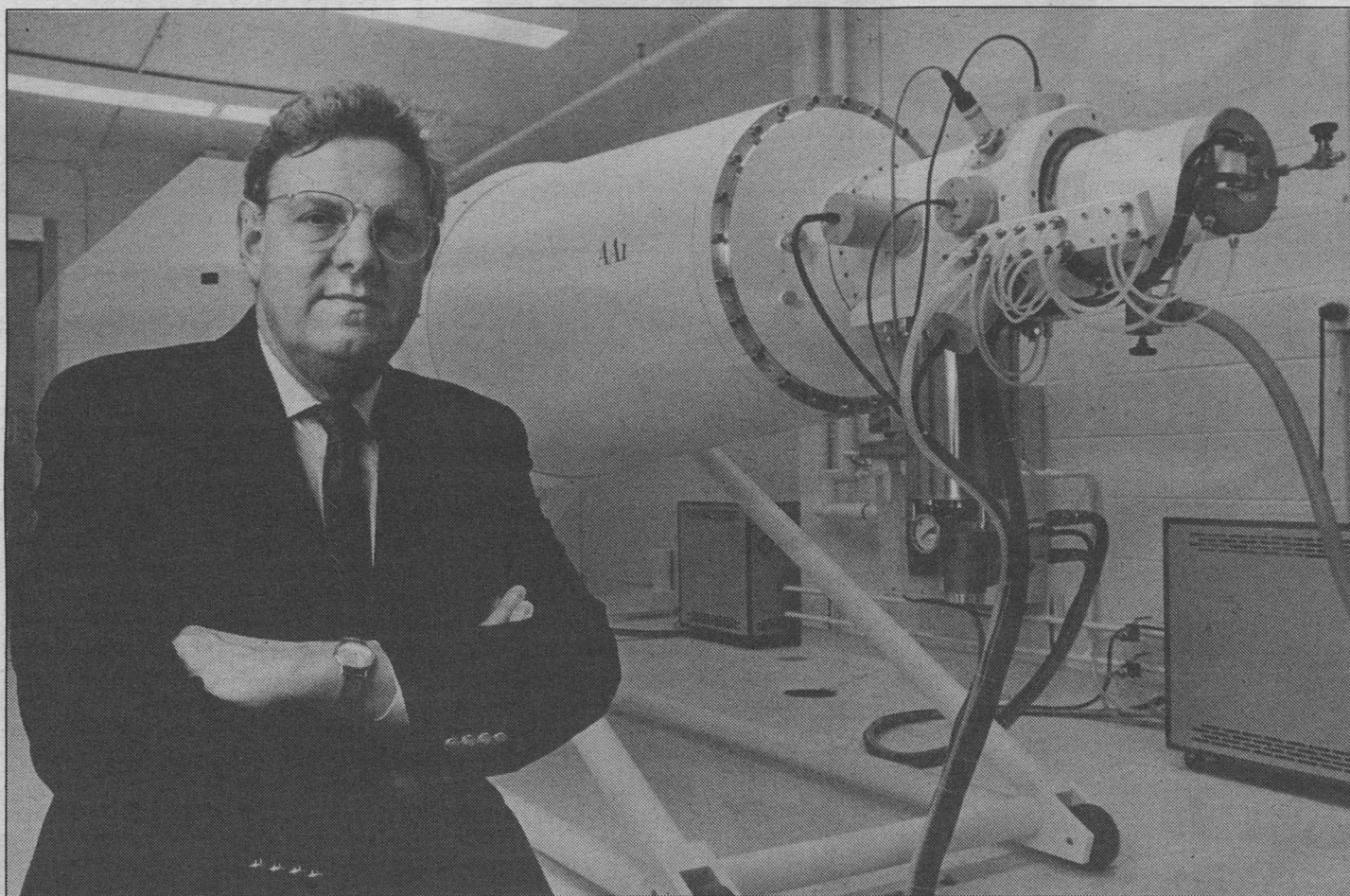
**Interdisciplinary approach:** Richard J. Scaldini's past intellectual pursuits influence his business management style *Page 3*

**Providing relief:** Washington University to assist employees displaced by the flood through interest-free loans, volunteer help *Page 6*

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# Medical Update



Michael Welch, Ph.D., helped develop the medical center's new tandem cascade accelerator, which was recently installed in the East Building. The prototype machine provides a cheaper source of isotopes for certain radiological examinations.

## Center's accelerator could curb costs of PET imaging

Washington University Medical Center recently became home to a prototype machine that applies "Star Wars" defense technology to medical needs. The machine, called a tandem cascade accelerator, may make certain radiological examinations cheaper and more widely available.

The accelerator is the only one of its kind in the world. It produces isotopes for positron emission tomography (PET), a type of medical scan used to study functions of the brain, heart and other areas of the body. It recently was installed at Washington University's Mallinckrodt Institute of Radiology.

The device is the first and only alternative to the massive and costly machines called cyclotrons that have been used to make medical isotopes since the early 1960s. Because the new accelerator is much cheaper to install and operate than a cyclotron, it could cut the cost of PET examinations by 25 percent and make PET more accessible to smaller research and clinical institutions, said Ronald Evens, M.D., professor and head of the Department of Radiology.

The 10-foot-long machine applies technology originally designed for the "Star Wars" defense system. It was developed by a Boston-area company called Science Research Laboratory (SRL) Inc. Over the course of development, SRL collaborated with Michael Welch, Ph.D., professor of radiology and chief of the Division of Radiation Sciences, to define the machine's parameters and to develop the necessary targetry for radioisotope production. Federal

funding for the accelerator, which totaled about \$3.5 million, primarily came from the Strategic Defense Initiative Organization (now known as the Ballistic Missiles Defense Organization), and also from the National Institutes of Health, said Ruth Shefer, Ph.D., a leader of the SRL design team.

The accelerator is the most recent example of Mallinckrodt Institute's contributions to PET technology. In the early 1970s, a team of Washington University investigators led by Michel M. Ter-Pogossian, Ph.D., professor of radiation sciences, designed the first PET scanner. In addition, the medical center was the first medical facility in the United States to install a cyclotron. Installation of a second cyclotron in the late 1970s made the medical center the only medical

facility to house two cyclotrons. Clinical studies conducted here and elsewhere with PET have led to a better understanding of memory, language, heart function and diseases such as cancer and Alzheimer's.

Currently, about 130 institutions in the world conduct PET research, Welch said. But for many, PET is not an option, largely because of the high cost of installing and operating cyclotrons, he explained. The new accelerator costs less than half of a cyclotron's \$2 million price tag. It also is much smaller and uses one-tenth the electricity. Because the accelerator is lighter—one ton compared with 20—it can be installed without the extensive construction often required for cyclotrons.

—Juli Leistner

## Cicero funded for drug abuse research

School of Medicine neuroscientist Theodore J. Cicero, Ph.D., professor of neuropharmacology in psychiatry, has received a Research Scientist Award from the National Institute of Drug Abuse (NIDA). Cicero, who also is associate vice chancellor for animal affairs and associate dean, has been a recipient of the award in the past. NIDA now has renewed it through 1998 to help fund his study of the neuroendocrinological aspects of substance abuse.

In addition, NIDA and the National Institute of Alcohol Abuse and Alcoholism have awarded grants totaling more than \$3.3 million to Cicero and his fellow School of Medicine researchers to study the impact of alcohol and drug use on human development.

All of the grants are renewals and will allow Cicero to continue his study of the effects of alcohol and drug use on the neuroendocrine regulation of puberty and fertility, and on the development of offspring produced by drug-exposed parents.

"We study the effects of substance abuse on two specific areas of the brain, the hippocampus and the hypothalamus," Cicero says. "We look at how the alcohol and drugs affect brain structure and then at how those changes in the brain are played out in alterations in the endocrine system."

Cicero's laboratory has established links between drug and alcohol use and delays in sexual maturation. Cicero says drugs and alcohol seem to influence the rate of release of various hormones that are important to development and puberty, delaying or changing the way in which maturation occurs. His findings in a rat model have demonstrated that alcohol and other abused substances significantly retard puberty and

sexual maturation in males and that these effects on reproductive function are much more pronounced in pubescent animals than in humans.

Other researchers have shown this pattern exists among children of adult alcoholics and drug abusers, even if the children themselves do not use drugs. Thus, Cicero's studies in animals apparently have direct clinical implications and will provide a model to examine the causes and mechanisms involved in the deficits observed in children of alcoholics or drug abusers.

The problem can be compounded if the children themselves begin to use drugs or alcohol. "Drugs are being used by younger kids, and we want to learn whether that will have an impact on the complex neural system regulating sexual maturation," Cicero says. "Age of first drug use is rapidly moving backwards, and we think that drug and alcohol use at these younger ages could be potentially devastating, but we need to prove that."

Cicero also will continue to study the link between paternal drug and alcohol use and developmental abnormalities in offspring. He has found selective physiological and cognitive deficits in the offspring of fathers exposed to alcohol or other drugs prior to conception. These deficits persist throughout the lifetime of the child and represent damage involuntarily inflicted upon children.

"Fetal alcohol syndrome is an acknowledged risk in mothers who abuse alcohol, but what about fathers?" Cicero asks. "We believe there is an effect on offspring when the father abuses drugs and alcohol. These new grants will allow us to determine what that link is."

## Ladenson occupies new clinical chemistry chair

The School of Medicine has created a new endowed chair in clinical chemistry, which will be held by Jack Ladenson, Ph.D., professor of pathology and medicine. His appointment was announced by John P. Atkinson, M.D., professor and chairman of the Department of Medicine, and Emil R. Unanue, M.D., professor and head of the Department of Pathology.

The chair will be known as the Oree M. Carroll and Lillian B. Ladenson Chair of Clinical Chemistry, named after Ladenson's father-in-law and mother.

The position is believed to be the first endowed chair for clinical chemistry in the United States. Clinical Chemistry is a section of the Division of Laboratory Medicine, a joint division of the departments of Medicine and Pathology. Laboratory medicine is a specialty devoted to the development, selection and interpretation of laboratory tests used for diagnosis and for monitoring health and disease.

The endowed chair will be funded in part by licensing fees that companies pay the University for the use of monoclonal antibodies Ladenson developed. The University and the departments of Medicine and Pathology will provide additional funding. Ladenson's antibodies have made it possible to create automated blood tests for diagnosing heart attacks. The automated tests—now used by about half of U.S. hospitals—replace assays that have been the diagnostic standard since the 1970s.

Ladenson came to Washington University in 1972 as an assistant professor of pathology and medicine. In 1980 he was named director of the clinical chemistry section, and in 1984 he became a full professor.

Besides his duties at Washington University, he is active in several professional societies, including the American Association for Clinical Chemistry. He was president of this organization in 1986 and now is chairman of the Board of Editors of its journal, *Clinical Chemistry*. He received the association's Award for Outstanding Contributions in Education in 1989. Ladenson also served as director for the American Board of Clinical Chemistry for six years.

# Record

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**Washington**  
WASHINGTON UNIVERSITY IN ST. LOUIS

## Barnes makes the grade

Barnes Hospital, part of Washington University Medical Center, was ranked among the nation's top hospitals in a survey compiled by U.S. News & World Report magazine. The report, published in July, placed Barnes among 15 hospitals that were ranked in the top 10 in at least four of the 16 specialties surveyed.

Barnes was recognized in the areas of endocrinology, neurology, ophthalmology and otolaryngology. Rankings for ophthalmology were based on physician surveys alone since mortality data are not kept for this specialty.

U.S. News & World Report annually compiles this report with the National Opinion Research Center at the University of Chicago. Rankings are based on measurement of objective criteria like mortality figures, technology, discharge planning and ratio of medical staff to beds, in addition to a survey of 2,400 physicians.



# Washington People

## Scaldini merges liberal arts with business

In the office of Richard J. Scaldini, Ph.D., director of executive programs and associate dean at the Olin School of Business, visitors' eyes are drawn to a framed poster of Paul Gauguin, a turn-of-the-century French painter. A subway advertisement for the New York School of Visual Arts, it shows Gauguin peering forlornly through the prison-like bars of a bank teller's slot. The bold-faced caption reads: "At 35, Paul Gauguin worked in a bank. IT'S NEVER TOO LATE."

There was a time when Scaldini and his investment banking colleagues considered Gauguin to be something of a cult hero. At 43, Gauguin abandoned his bourgeois banking career — as well as a wife and five children — and sailed from Paris for Tahiti to live with the natives and paint vivid scenes of paradise. Prints of the poster were popular in the New York offices of UBS Securities where Scaldini worked from 1983 to 1991, rising to the rank of managing director of corporate finance.

Management at UBS Securities, a division of Union Bank of Switzerland, did not care for the poster's slap at banking and viewed its display as a sign of a disgruntled and rebellious employee. Scaldini claims to have been neither. He loved banking. Yet he did have other traits in common with the painter — a passion for the arts and a propensity for radical career changes.

During the late 1960s, Scaldini was on a decidedly different track. He became captivated by the avant-garde and modernist movements while pursuing a bachelor's degree in French literature at Tufts University. He studied in Paris at the Sorbonne in 1968-69 and at Ecole Normale Supérieure de Paris in 1973-74 en route to a doctorate in French literature from Yale University in 1976. He taught at Dartmouth College from 1975-79 as an assistant professor in the Comparative Literature Program and the Department of Romance Languages and Literatures. He is fluent in French and speaks basic German and Italian.

"My time at Tufts and my graduate work at Yale are tremendously important to me," he says. "If I have an intellectual base to my work, I got it there. That part of my life continues to have incredible influence on my approach to business."

Not surprisingly, Scaldini is a firm believer in the value of liberal arts to a business management career. Since joining Olin in 1991, he has been a staunch advocate of stronger ties between the school and other areas of the University. He points to the new joint graduate degree in business and East Asian studies as an example of the great opportunities that exist.

"One of the things that I like best about being at a university today is the increasing integration of various disciplines, departments and schools. The motivation to integrate disciplines is much greater than it was when I taught at Dartmouth a dozen years ago. The great intellectual warehouse that is a university is starting to come together — intellectual activities once conducted in isolation are now responding to the opportunity to deal with common issues."

A priority for Scaldini in his new position is expansion of Olin's executive education offerings to include more short courses, seminars and customized training for individual firms. His vision is that corporations will come to think of the school's Executive Programs Group as a trusted adviser in the development of training programs that meet long-term management objectives.

"I'd like this office to be considered the first point of contact for companies seeking assistance with any issue that has an educational dimension," Scaldini says. "We seek a relationship with these companies similar to those which they maintain with their legal, banking and accounting advisers."

Executive education, says Scaldini, should be a continuum of degree and non-degree programs. Key executives might be singled out for Olin's Executive MBA program, while others could be directed to specific courses, such as Olin's seminar on manufacturing strategy. Departments with special needs might be targeted for custom-designed training programs.

Scaldini sees this new emphasis on customized management education programs as a natural extension of his own background, as well as the business school's longstanding tradition of corporate partnership.

"My professional life has been split between academia and industry, but a common thread running through both has been the advisory nature of my role. The product in each case was advice and information and my ability to analyze. That's why it's made sense for me to place such a

heavy emphasis on customized executive education programs of the Olin School. It fits my background and it fits the school."

Scaldini's metamorphosis from literary scholar to international finance executive began in 1979 when he left Dartmouth to pursue an M.B.A. at Columbia University. "I did graduate work and taught at two institutions where the business side of teaching and research was very sophisticated. Romance Languages offered about 22 international programs each year. As a faculty member in

by the next business day. His passport never left his brief case.

"Most of my work involved extensive cross-border negotiations. Rarely would the client company and the investors be homogeneous, domestic companies. The cultural complexities of these arrangements can be enormous. I worked side-by-side with Brits, Swedes, French, Czechs and Dutch. Everyone was speaking someone else's language. Subtle messages can be incredibly important. You really have to listen for nuances."

Scaldini has a tendency to find himself thrust into situations, industries and issues that are in the midst of big changes, often with some crisis dimension.

"I entered the business world in the early 1980s at a time of great turmoil in international finance and the capital markets," he says. "People were grappling with how to manage the risk of new financial instruments spawned by highly volatile markets at the same time these transactions were becoming increasingly global. There was this free-for-all of complexity and opportunity and volatility. We witnessed an unbelievable sea change in global finance."

Now, he sees higher education headed for the same sort of sea change. He contends that many changes in higher education are being driven by the demands of an increasingly complex modern workplace.

"Universities are striving to meet the needs of a business world that functions in a global economy. We do business around the world with groups that are racially, ethnically and culturally diverse, and now we're seeing that same mix evolving in our domestic workforce. Workers face cultural, linguistic and historical issues that American business schools historically have had little need to address. To these differences, you must add the sheer complexity of operations conducted on a global versus domestic scale, as well as the emergence of important alternative business methods outside the United States. This is why a liberal arts dimension to one's education has become a very important and critical preparation for business and business studies."

Scaldini's own business perspective is indelibly stamped with a world view gleaned from the liberal arts. He interprets many of the hottest business fads and trends as a function of a business community

caught in the throes of a "post-modern" crisis — an outlook that surprisingly draws on his early research into literary applications of a surrealist painting method known as cubist collage.

One theory of these modernist writings is that all writing is a "re-reading" of previous writings. Scaldini's dissertation explored this concept of "intertextuality" in the work of Louis Aragon, a French writer who applied collage techniques to literature.

"These movements sought to bring about serious change, not only in the arts and literature, but a revolution in society itself," says Scaldini. "The crucial problem for any modernist is how do you stay modern? If you must subject yourself to continuous revolution and revision to remain modern, your sense of identity obviously goes to hell."

American business, asserts Scaldini, is now facing its own post-modern identity crisis.

"The business intelligentsia today finds itself in a situation much like that faced by the modernists after World War II. We thought we had developed a business system that would be the envy of the world forever. But life changes. Countries that were flat on their backs following World War II came back to contest our dominance in the world economy. This had a huge impact on how we view ourselves as a nation. We discovered our mortality, both as a country and as a business community."

America, in seeking to redefine itself, has looked hard at what it takes to compete in the global marketplace and found that the tools it needs are no longer drawn solely from business disciplines.

While he views post-modernism as a useful paradigm for understanding business trends, Scaldini adds that one of the cruel lessons of modernist thought is that we shouldn't hold out much hope for lasting peace of mind:

"American business thought it had mastered it all. Now, it must face the necessity of continuous change and this can be very unsettling. This is the root of the tremendous upheaval that American business is going through. Why do you think 'continuous learning' and 'self-assessment' are such hot topics lately? Business has come to grips with the hard reality that there is no stopping, no arriving, no ultimate truth to hang your hat on — not then, not now, not ever."

— Gerry Everding



**"The great intellectual warehouse that is a university is starting to come together — intellectual activities once conducted in isolation are now responding to the opportunity to deal with common issues."**

charge of one of these programs, I found it wasn't enough to be good at teaching and research. You had to be a good manager as well."

His plans for a quick return to academic life after business school fell apart during a summer internship with Chemical Bank in New York. He was loaned to the investment banking department to write a document for investors in a \$9 million industrial revenue bond offering. He ended up working for Chemical Bank for three years after receiving his M.B.A.

"I was waylaid and seduced by the excitement of international finance," says Scaldini. "I fell in love with the whole process of advising clients on the fine points of capital markets. My role as an intermediary was essential to the entire process of bringing issuers and investors together."

Investment banking helped him well understand the importance of a global perspective. It was common to come to work and learn he had to be in London or Zurich



# Calendar

Aug. 5-28



## Exhibitions

**"Tales and Traditions: Storytelling in 20th-century American Craft."** Through Aug. 15. Gallery of Art, upper gallery, Steinberg Hall. Hours: 10 a.m.-5 p.m. Tuesday-Friday; 1-5 p.m. weekends. Tours available 1:30 p.m. Wednesdays, Saturdays and Sundays.



## Films

### Tuesday, Aug. 10

**Summer School Foreign Film Series.** "Letters From the Park" (Spanish with English subtitles). Room 219 South Ridgley Hall. 7:30 p.m.

### Wednesday, Aug. 11

**Summer School American Film Series.** "Giant." Room 219 South Ridgley Hall. 7:30 p.m.



## Lectures

### Friday, Aug. 20

**Pediatric Grand Rounds.** "Metabolic Control Does Matter: Lessons From the Diabetes Control and Complications Trial (D.C.C.T.)," Neil H. White, assoc. prof. of pediatrics. Clopton Aud., 4950 Children's Place. 9:15 a.m.

### Thursday, Aug. 26

**Central Institute for the Deaf Research Seminars.** "Steady-state Retinal Evoked Potentials to Uniform Field and Pattern Stimulation: I. Physiological Aspects and Clinical Applications (by Benedetto Falsini, visiting research scientist from Eye Clinic, Catholic University, Rome) and II. Flicker and Pattern Evoked Potential Recording: Program Implementation in LabView2," by Arnold Heidbreder, senior design engineer and D.J. Meyer, project engineer/network manager, CID. Second Floor Aud., Clinics and Research Bldg. 4 p.m.

### Friday, Aug. 27

**Pediatric Grand Rounds.** "There's a Fungus Among Us," George S. Kobayashi, prof., Dept. of Internal Medicine and Molecular Microbiology. Clopton Aud., 4950 Children's Place. 9:15 a.m.



## Miscellany

### Wednesday, Aug. 11

**University College workshop.** "Returning to Learning." Room 30 January Hall. Free. For more info. and reservations, call 935-6777. 5:30 p.m.

### Saturday, Aug. 21

**University College orientation and tour.** "Introduction to Washington University." Room 30 January Hall. For more info., call 935-6777. 10 a.m.

**Plant sale.** Sponsored by Women's Society of Washington University, sale features window-sill plants to small potted trees. North of Wohl Center. A second location will be in Bowles Plaza. Prices range from \$4 to \$25. Proceeds benefit the Women's Society Scholarship Fund for Washington University students. For more info., call 935-5105. 10 a.m.-4 p.m.

### Monday, Aug. 23

**Dance placement auditions.** Performing Arts Dept. dance program. For admission to classes above the introductory level (for freshmen, transfer students and returning students without the prerequisite courses). Room 207 Mallinckrodt Center. 10 a.m.



## Special Events

*The following Orientation Week events are required programs for all new students. Other members of the University community are welcome to attend. All events are free. For a complete schedule of Orientation Week events or for more info., call 935-5037.*

### Friday, August 20

**Financial Aid Meetings** for students in Arts and Sciences. Edison Theatre. 3-4 p.m. (August 22 for architecture, business, engineering and fine arts students, Edison Theatre, 2-3 p.m.; August 23 if you missed your assigned time, Edison Theatre, 11 a.m.-noon)

**Chancellor's Welcome.** Graham Chapel. 7 p.m.

**The Frenzy.** Intramural Field behind Eliot Residence Hall. (Rain location: Recreational Gym, Athletic Complex.) 8:30-10:30 p.m.

**Floor Meetings.** Locations will be announced. 10:30 p.m. (There also will be meetings on August 21 and August 25 at 9 p.m. as assigned.)

### Saturday, August 21

**English Placement Exams** for Arts and Sciences students. Room 458 Louderman Hall. 9 a.m.

**Math Placement Exams.** Engineering students in Room 100 Brown Hall from 9-11 a.m. From 2:30-4:30 p.m. the following groups will take the exams. Arts and Sciences students: Last names beginning with A-H in Room 110 January Hall; last names I-R, Room 100 Brown Hall; last names S-Z, Room 118 Brown Hall. Architecture students in Room 100 Busch Hall. Business students in Rooms 106 and 109 Simon Hall. Fine Arts students in Room 100 Busch Hall.

**Dean's Meetings for Freshmen.** Architecture in Room 116 Givens Hall; Arts and Sciences in Edison Theatre; Business in May Aud., Simon Hall; Engineering in Room 458 Louderman Hall; Fine Arts in Steinberg Hall Aud. 1 p.m.

**Choices 101: An Introduction to the First-year Experience.** Edison Theatre. 6:30 p.m. for South Forty-East. 8 p.m. for South Forty-West and commuter students.

### Sunday, August 22

**Informational Meeting.** School of Business. Students to be contacted individually. 3 p.m.

**Informational Meeting.** School of Engineering. Students contacted individually. 4 p.m.

**Informational Meeting.** College of Arts and Sciences. Students contacted individually. 4:30 p.m.

**Informational Meeting.** School of Fine Arts. Students contacted individually. 5 p.m.

### 'A Whole New World'

## Orientation gives entire campus chance to welcome students

This year's Orientation Week theme "A Whole New World" reflects planners' efforts to include the entire University community.

"We're trying to create a whole new world where everyone is involved," explained Marcia Hayes-Harris, assistant director of Residential Life.

During Orientation Week, faculty and staff will be given "Welcome to WU" buttons. Ordinarily, buttons are distributed only to new students. "This year we are personally inviting people to participate in Orientation. Wear this button, feel free to answer questions and reach out to the new students," Hayes-Harris said. She added that Orientation planners want to follow the example set by the April Welcome program, which involved all employees. All of the week's social programs are open to the University community. Events are free, with the exception of an August 21 barbecue.

The buttons are just one of many changes to this year's Orientation Week. Planners also are sending a copy of the Orientation schedule to every campus office, as well as a poster listing the schedule.

Orientation is formally a five-day program that introduces new students to campus. However, the complete schedule of events extends into September with more than 300 programs. The official week runs from August 20-25 and features programs not only for freshmen, but for transfer, international and commuter students as well.

Organizers say it seems to take new students from the beginning of the school year until Thanksgiving Break to feel at ease in their new home. The campus community can play a crucial role in making new students feel welcome.

Unlike seasoned members of the University community, new students can find the campus a little disorienting. "If we have patience, we can make a difference in how comfortable they feel here. We can all play a part in welcoming students," said Karen Levin Coburn, associate dean for student development.

Planners also have restructured Orientation

Week to promote more small group interaction. They made these changes based upon student recommendations, both through the annual student evaluations and from students' comments in Focus groups.

In the Focus groups, administrators, faculty and staff are interviewing students on their entire student experience. Hayes-Harris, who attends the Focus meetings, is most interested in students' perspectives on Orientation. She said many students commented they enjoyed Orientation Week and remembered the faces of their peers, but really didn't get a chance to connect during program activities. Hayes-Harris said she is hopeful that more small group interaction will give them a chance to build relationships from the start.

A brand new event is the Scavenger Hunt for the entire freshman class and transfer students. The hunt, designed to acclimate new students to campus, will be held August 20-23. Clues will lead students across campus and into buildings. Along the way, new students will find historical tidbits about the University.

On August 21, a barbecue is planned for parents and students from 4:30 to 6 p.m. at Francis Field. This new event will give incoming students their first glimpse of the Battling Bears football team in action during an intra-squad scrimmage between the Freshmen and Varsity teams. Resident Advisors will provide the half-time entertainment with a rendition of either the fight song or the Alma Mater.

The culmination of Orientation Week is St. Louis Live at Wash U!, a five-hour party starting at 6:30 p.m. in Brookings Quadrangle August 23. The carnival-like atmosphere will feature food vendors from University City's Loop, the Central West End and other local restaurants. In addition, city council representatives will provide information about surrounding communities. Also, a band, jugglers and a caricaturist will be on hand.

Prior to St. Louis Live, new students will assemble at 6 p.m. in the Quadrangle for another first-time event. Planners have

### Monday, August 23

**Academic Advising Appointments and Registration.** 8:30 a.m.-6 p.m.

**How to Be Successful in Calculus.** Edison Theatre. 3:30 p.m.

**St. Louis Live at Wash U!** Brookings Quadrangle. (Rain location: Recreational Gym, Athletic Complex.) 6 p.m.

### Tuesday, August 24

**Academic Advising Appointments and Registration.** 8:30 a.m.-4:30 p.m.

**How to Be Successful in Chemistry 111A.** Edison Theatre. 3 p.m.

**Informational Meeting.** School of Architecture. Students contacted individually. 4 p.m.

### Wednesday, August 25

**Convocation.** Graham Chapel. 11 a.m.

### 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 Deborah Parker at Box 1070 (or via fax: 935-4259). Submission forms are available by calling 935-5235.

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 935-5235.

scheduled a class photo for the incoming students, including transfers, commuters and international students. This is to promote a bond within the class, Hayes-Harris said.

In addition to the social activities, many educational programs will run during Orientation Week. Choices 101, a series of skits performed by the upperclassmen on the first-year experience, is one of the biggest events. A version of Choices 101 has been created this year for transfer students, titled Bear Facts 101: An Introduction to the Transfer Student Experience.

Other activities range from a fine arts slide show to Olin Library tours to an introductory session on campus computing. As always, there will be placement examinations and auditions held for various languages and dance classes, as well as other academic classes. Two new programs teach how to survive calculus and chemistry.

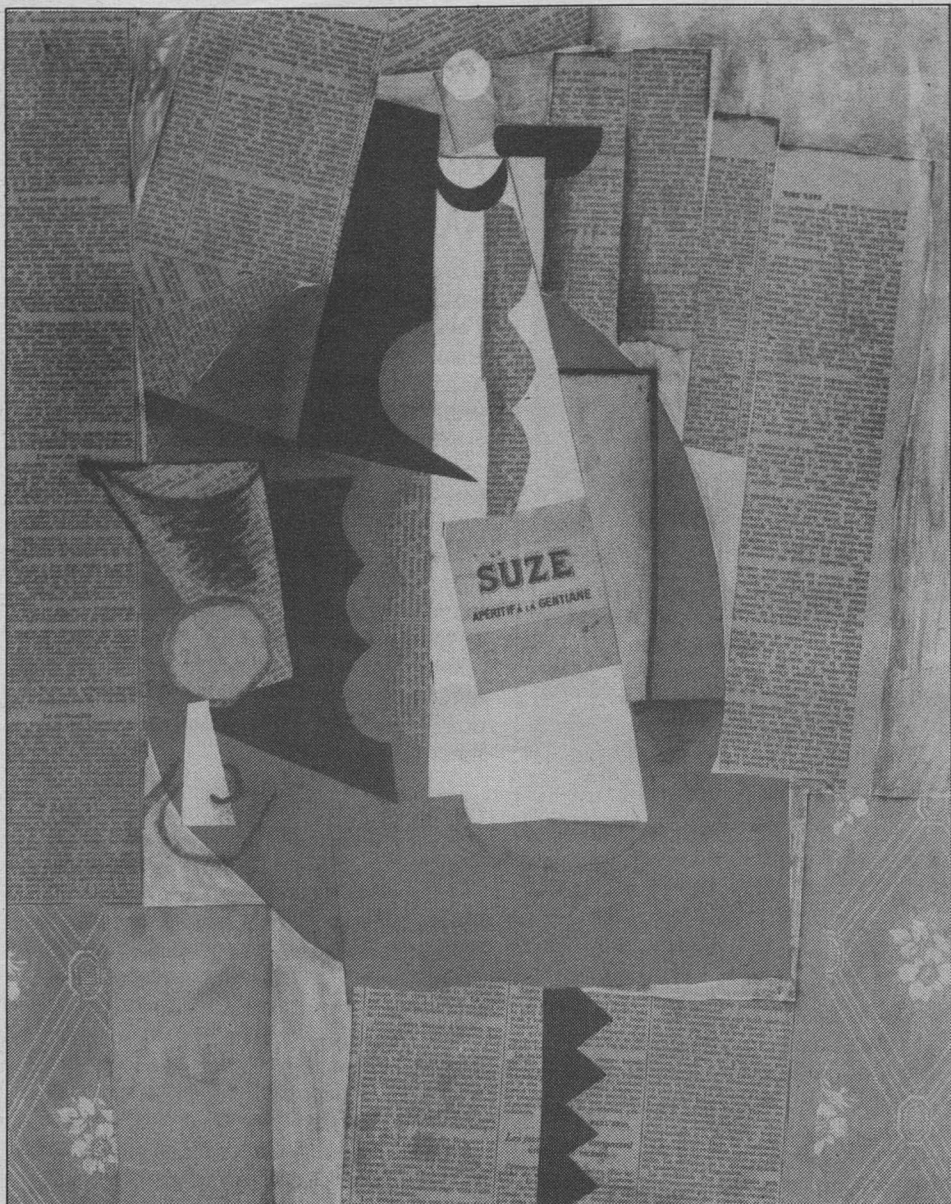
### Flood reports available

In response to the flood emergency, the U.S. Department of Commerce is providing flood information and reports through a toll-free fax number. The number is 1-800-647-3349.

To use the number, you must have a fax machine to which material can be sent and you must call from a touch-tone phone. After reaching the number, a recorded voice will provide simple instructions for using the system.

Reports and briefing material are provided by the Federal Emergency Management Agency. Reports include information by state, as well as information on a broad range of federal programs. Each program is identified by a four-digit number used for ordering, such as Individual and Family Assistance Grants (2428), Disaster Unemployment Assistance (2430), Energy Assistance (2434), and Hazardous Material Assistance (2442). The recorded message also provides additional options for selection. Response time to individual requests is quick.





Pablo Picasso's "La Suze" (above) will be featured in a 226-page book spotlighting the Gallery of Art's 85 finest masterpieces. Record-setting proceeds from St. Louis Printmarket are helping to underwrite the book.

## Printmarket yields record \$15,000, helps underwrite book on gallery

The number 10 proved to be a lucky one for the 1993 St. Louis Printmarket, which in its 10th year raised a record-setting \$15,000 for the Washington University Gallery of Art. St. Louis Printmarket, a show and sale of art works on paper, was hosted by the Gallery of Art April 2 through 4. Nineteen local and national print dealers, including the Collaborative Print Shop of the School of Fine Arts, exhibited works ranging from antique to contemporary. This marked the third consecutive year that Printmarket proceeds have benefitted the gallery.

"The gallery is so fortunate to be the benefactor of Printmarket funds and to serve as the host of this well-respected event," says Joseph D. Ketner, director of the Gallery of Art. "This year's generous donation and those from the past two years have allowed us to make purchases and delve into projects that otherwise would have been out of the question. Printmarket also benefits us by bringing into the gallery people from St. Louis and beyond who may not have known about us and our outstanding permanent collection."

According to Ketner, this year's Printmarket proceeds will help underwrite the publication of a book about the gallery's masterpieces, including Willem

deKooning's "Saturday Night," Pablo Picasso's "La Suze," Leon Lhermitte's "The Harvest," George Caleb Bingham's "Daniel Boone Escorting Settlers Through the Cumberland Gap," Harriet Hosmer's "Oenone" and many more. Ketner says the

book will be used as an exhibition catalog for a national collection tour, as an educational tool and as a promotional tool for the gallery. "The book is the culmination of four years of research on the 85 finest pieces in the gallery's permanent collection," he says. The 226-page book, due out in

**"The book is the culmination of four years of research on the 85 finest pieces in the gallery's permanent collection."**

**— Joseph D. Ketner**

1994, will feature 85 color reproductions and 50 supplemental illustrations.

Another event highlight was the Printmarket's presentation of an engraved print to the Gallery of Art. The print by artist John Sartain is patterned after a work by George Caleb Bingham. The gallery will hang the print in honor of Cecile K. Lowenhaupt, recognizing her as St. Louis Printmarket founder and for serving as its chair for 10 years. Lowenhaupt (Koven) is a 1941 liberal arts graduate of the University.

The gallery will host St. Louis Printmarket again in 1994 from April 8 through 10.

## University faculty, high school students work together on intensive research problems — from page 1

made me want to look in-state (for colleges) and that led me directly to Washington University. Washington University said it would accept me and I came to WU that fall," he said.

Although it is unusual to accept students without high school diplomas, William L. "Bud" Marsden, associate dean, School of Engineering and Applied Science, said it happens occasionally. Vincent was accepted for early admission after a personal interview was conducted and his excellent academic record was reviewed. High school teachers and counselors wrote letters supporting Vincent's decision. His college entrance exams were outstanding.

Now, Vincent is involved in a third program offered by the institute, the Collaborative for Applied Experiences in Science (CAES). This program matches Engelmann institute graduates with St. Louis area science- or engineering-based companies, healthcare providers and universities for summer work experience. The program is for students who don't want a typical summer job.

This is the first year for CAES. Already, the institute has placed students with such institutions as Cardinal Glennon Children's Hospital, Care-Tech Laboratories, Howard Hughes Medical Research Laboratories at Washington University, Mallinckrodt Medical Inc., Mallinckrodt Specialty Chemicals Co., Monsanto Co. and the UM-St. Louis Department of Biology, among others.

Vincent is working this summer in the lab of Linda Pike, Ph.D., associate professor of biochemistry and molecular biophysics. He is creating three mutants of a cell surface protein to determine how a specific protein acts to regulate cell function. It's more than a full-time job. He frequently stops by the lab on the weekends to check his cells.

Although there are five programs within the Engelmann institute, Washington University is primarily involved with Engelmann II, the Scholar Research Program, and CAES. The University became involved with the Engelmann institute as Engelmann II was being formed three years ago.

Engelmann I was highly successful, and the University of Missouri-St. Louis "saw the need for follow-through," explains Ken Mares, Ph.D., associate director of the institute and adjunct associate professor at UM-St. Louis.

Engelmann II started with 15 students, but since has grown to 38. "We had to look elsewhere for research opportunities (outside of

UM-St. Louis and St. Louis University). A number of students were interested in engineering. It was clear we had to talk to Washington University," Mares said.

Washington's School of Engineering faculty soon began volunteering their time in mentoring relationships. Now the College of Arts and Sciences is getting involved. "Wash. U has been super," said Mares. "Wash. U. really rolled out the red carpet, as has St. Louis U., as has our own faculty."

"It has been very heartening to see outstanding researchers from three institutions of higher education come together to form a partnership to nurture promising young scientists, mathematicians and engineers," said

**"Sometimes they (students) will see things in a different way. They may not see it through fully, but they stimulate thinking in the right direction."**

**— Richard L. Axelbaum**

Charles Granger, director of the Engelmann program. "The intense interest and contributions of these respected faculty in developing the next generation of scholars is pleasing to all involved and should be reassuring to our community."

Nine Washington University faculty members are donating their time to the Engelmann II program to serve as mentors. They are: John A. Stern, Ph.D., of psychology; Robert G. Kranz, Ph.D., of biology; and Richard L. Axelbaum, Ph.D., H. Richard Grodsky, D.Sc., Bamin Khomani, Ph.D., Stan D. Kwasny, Ph.D., Ronald P. Loui, Ph.D., William D. Richard, Ph.D., and Donald L. Snyder, Ph.D. — all of engineering.

In addition, four Washington faculty members agreed to present lectures to the Engelmann scholars. They are: Loui; James Miller, Ph.D., of the School of Medicine; Clifford M. Will, Ph.D., of physics; and Michael Wyssession, Ph.D., of earth and planetary sciences.

In the mentoring program, each scientist-student duo works on an intensive research problem. The program also gives the high-

schoolers their first look at real-life graduate students, Mares said. Mares added that the research projects are not idle exercises, but serious endeavors involving the testing and analysis of data.

"The relationship between mentor and student is phenomenal," said Judy Leonard, co-director of Engelmann and a math/science teacher at McClure High School. "It's a close relationship. The students are the best and brightest, and they can fulfill the obligations and expectations of mentor scientists."

Richard Axelbaum is conducting combustion and energy research with Chris Perrey from Francis-Howell North High School. Axelbaum said they are trying to produce nanometer-size particles of titanium diboride in a hydrogen-air-titanium tetrachloride-boron trichloride flame.

Axelbaum said he volunteered for the program because it would be a good opportunity to interact with high school students. "Lab experience is valuable for students," he said. "It's not a guarantee that I will gain, but often I do. The students have open minds. Sometimes they will see things in a different way. They may not see it through fully, but they stimulate thinking in the right direction," he said.

Robert Kranz is overseeing Rebecca Skomal, a junior at Fort Zumwalt South High School who is doing genetic engineering of genes involved in polymer production. Kranz said the program is a good way to lure some of the best students to Washington University. "Engelmann takes the top students. The students go back to their high schools and talk up Washington University. And it's a good community service," he said.

So far, 23 students who have gone through the Engelmann programs have enrolled at Washington University.

John Stern agreed that Engelmann can bring exceptional students, particularly minority students, to the University. He is working with Philana Harris, an African-American student from Eskridge High School, on a blinking study. Stern said Harris didn't know much about Washington University upon entering the program. He recently took her on a campus tour.

Harris appreciates the "inside look" at the campus. At first, she was a little intimidated about dealing with Stern, but she soon overcame her fears. "He's sort of up there, you know — over all of the psychology depart-

ment," she said. "I thought, 'How am I going to talk to him?' But he's made it quite easy for me.

"I'm the first kid from my school to be accepted or even apply," she continued. "This has let me know that I could do really good in a lab. I'm really proud of Engelmann. The kids really benefit from the hands-on experience."

Harris said it was interesting coming from an all-black school and meeting some of the white students from more "elitist" schools. She found that they struggle in honors programs, too. Harris said the Engelmann program has opened up her social circle. Now, she socializes with students from all across the St. Louis area, not just those in her neighborhood. She frequently exchanges articles with fellow Engelmann student Jennifer Wu, who shares her interest in biochemistry. "We all help each other," she said.

"The Engelmann programs are a valuable addition to the area's high school education," said Provost Edward S. Macias, Ph.D. "We are all proud that Washington University is an active participant, and we hope to expand our involvement in the future."

Mares said it's unusual that a private, nationally known research institution, an urban, public state university and a Jesuit institution are willing to work together.

"It is a great feeling to be part of an extensive partnership that is successfully contributing to the enrichment of our youth at a critical stage of their academic and social development," Granger said.

*— Deborah Parker*

## Coach Troy Engle leads three-day walking clinics

Three-day fitness walking clinics will be conducted during the weeks of August 23 and 30 by Washington University track and field coach Troy Engle, who is an internationally recognized instructor in exercise walking and race-walking technique.

Three one-hour clinics will begin at 7 a.m. on Mondays, Wednesdays and Fridays at Bushyhead Track. Cost for one week is \$25. Individual and advanced sessions also are available. The clinics will cover how to get started on a fitness walking program, developing proper technique and designing a lifetime fitness program.

To enroll or for more information, call 935-7303 or 863-9412.





Tariton Corp. workers prepare the 500-space parking garage that will open the week of August 9. The new garage will be connected to the existing garage, which has 400 parking spaces. Both garages are located behind the Mudd Law Building.

## Magazine editor co-writes song to raise flood relief funds

Steve Givens, editor of Washington University Magazine, co-wrote a song, hoping it might raise money for area flood victims. He surely will accomplish his goal, now that the song has been made into a video scheduled to air on The Nashville Network (TNN) and his music trio has been asked to perform in benefit concerts with big-name entertainers.

"The whole thing happened so quickly," Givens said.

On July 15, Givens was driving down the highway, listening to the news. The name of the song "Stand Your Ground" immediately came to him. Within 20 seconds, he developed the chorus and the idea that the Salvation Army could use the song for flood efforts. He shared the idea with Mike Hall and Barry LaFond. The threesome have been per-

Angeli and a KETC Channel 9 film crew recorded flood scenes. The video also contains footage of Spare Parts performing the song near a river levee. Last Sunday, Spare Parts spent 14 hours in a recording session. The original demo just contained guitar and piano, but the recording session included drums, bass, electric guitar, synthesized strings and harmony vocals. All the participants are St. Louis musicians who volunteered their time to the project. Smith/Lee Studios in Maplewood also donated its facilities.

The video may premiere on TNN as early as August 4. A tag line on the video asks for

donations to the Salvation Army.

The trio also may perform on the stage alongside major entertainers. "There are plans for a large benefit concert at the end of August with Chicago, Amy Grant and Gloria Estefan," Givens said.

Future plans even call for radio distribution and marketing the video, with all proceeds going to flood relief. "I've just always looked up to performers who use the platform of music to do something really good for people. To have the chance to do this feels great. Getting national exposure coupled with doing a lot of good is overwhelming," he said.

—Deborah Parker

## University provides volunteers, interest-free loans to employees who are flood victims

Washington University will provide assistance to University employees who have been displaced or seriously affected by the flood, according to Chancellor William H. Danforth. This relief might come in the form of interest-free loans or volunteer help in cleaning up homes after the water recedes. Short-term housing is available in the Buckingham apartment complex near the Washington University Medical Center for employees who have had to leave their flooded homes.

Those who have been affected by the flood should contact Karen Baker in the Office of Human Resources on the Hilltop Campus at 935-5990 or Judith Mahoney in the School of Medicine's human resources office at 362-4920.

The Record would like to acknowledge those who have organized special efforts and volunteered their time to flood relief. Volun-

teers are asked to send a brief note about their activities to the Record at Box 1070. The Record will print a story this fall about Washington University people and their response to the flooding.

For those who can't volunteer, but who would like to give a donation, disaster relief agencies have indicated that monetary contributions provide the most flexibility in meeting everyone's relief needs.

Make checks payable to the American Red Cross (note on the check "St. Louis Disaster Relief Fund") and send to: The American Red Cross, 4050 Lindell Blvd., St. Louis, MO 63108. For those who would like to send a group of checks together, send them to the attention of Jan Rasmussen at the above address and indicate the source of the gifts.

Checks also may be sent to: The Salvation Army, 3800 Lindell Blvd., St. Louis, Mo. 63108.

## Educators encourage others to learn about Harlem Renaissance — from page 1

St. Louis Public School District. Susan B. LaGrone, a coordinator in the LACE unit, served as Riekes' assistant. The Metropolitan St. Louis Alliance of Black School Educators co-hosted the institute.

In addition to Early, other University faculty who taught at the institute were Wayne Fields, Ph.D., dean of University College and professor of English, and Nancy Grant, Ph.D., associate professor of history. James E. McLeod, dean of the College of Arts and Sciences, hosted a reception for institute participants.

NABSE received a \$117,000 grant from the National Endowment for the Humanities (NEH) to sponsor the July 12-30 institute, which was modeled after a project in the St. Louis public schools.

"The African-American Roots of American Culture: The Harlem Renaissance" featured an interdisciplinary faculty from Washington University, University of Missouri-St. Louis and the University of North Carolina, Chapel Hill, who detailed the historical, social, cultural and literary forces of the era. Topics included background information leading to the Renaissance period, segregation, African-American city life, rap music, women in arts,

politics and business, and civil rights.

After reading novels, studying and reflecting on the Harlem Renaissance, the educators now are encouraging others to learn about the period. They are sharing information, ideas and resources with students and others in their school districts, along with educators throughout the country. During NABSE's national convention to be held in Houston in November, Early, Riekes and Smith, along with several others affiliated with the institute, will deliver a seminar on the institute's highlights and will discuss *The Blue Print for the Harlem Renaissance*, a book written by the 35 participants. The book will be published by NABSE and the NEH in November.

In addition to enhancing awareness about the Harlem Renaissance, the alliance is working with national textbook publishers such as Harcourt, Brace & Co. to include more information in their textbooks about African-Americans' contributions during the period. "The contributions of African-Americans in the Renaissance has almost been void in our textbooks," says Smith. "However many textbook publishers seeking information welcome any assis-

## University suspends Alpha Iota chapter of Beta Theta Pi

Washington University has suspended indefinitely the charter of the Alpha Iota chapter of Beta Theta Pi fraternity and has closed its campus house to chapter use. This move follows a thorough review of the chapter's compliance with Terms of Probation set down during the 1992-93 academic year.

The 1992-93 probation resulted from a recent record of inappropriate behavior and concern about overall chapter operations. At the time the fraternity was placed on probation, the University outlined specific standards and expectations to be followed in order to help the Alpha Iota chapter live up to its mission and responsibilities to the University and the Fraternity. The chapter's failure to comply with the Terms of Probation led to the suspension and closure of the fraternity house.

"Everyone involved deeply regrets that Alpha Iota's recent history and its failure to comply with clearly established standards and expectations has resulted in this suspension of its charter," says Justin X. Carroll, dean of students. "This action is necessary for Washington University to maintain the kind of community and foster the campus climate we all desire."

The University has notified all undergraduate chapter members and chapter alumni of its action in a recent letter to each of them. The letter stated that the chapter has been suspended indefinitely and may not participate as a group in the Intrafraternity Council or any of its activities, such as new member recruitment and training, intramural sports and group philanthropic activities; that the house at #1 Fraternity Row has been closed to the chapter; that the term of the suspension is indefinite; and that the University will be willing to consider a proposal from Beta Theta Pi fraternity to recolonize at some time in the future, but that no such request will be considered before July 1, 1996.

The Beta Theta Pi National Fraternity has accepted the University's decision.

The members have been informed that the University's residence halls will accommodate the 16 students who had made contractual commitments to live in the fraternity house for the coming year.

According to Carroll, fraternities and sororities have been and will continue to be an important part of student life at Washington University. "Greek-letter organizations support the values and the aspirations of the University by contributing significantly to the enhancement of University life. Students who join become members of organizations founded on the high ideals of respect, honor, truth, justice, love, community service and scholastic excellence," he says. "However, we expect our fraternities and sororities to set and meet high standards for achievement and for individual and group behavior, and to hold accountable members who do not live up to them."

forming contemporary folk music locally and regionally for two years under the name Spare Parts.

They wrote and revised, finishing the song within a week. On July 26, the Salvation Army listened to the song.

A Salvation Army public relations officer gave the song to Lou Angeli, a freelance video producer. Angeli has been documenting the flood for the Salvation Army, in addition to helping with disaster relief.

"He had been wanting to do a music video, but didn't have a song," Givens said. He explained that the song's words fit the experiences of a real-life couple from Spanish Lake that Angeli had been helping.

On July 31, the videotape was made.

tance," she says, noting that representatives from Harcourt, Brace & Co. participated in the institute and sponsored the St. Louis Black Repertory Company's performance on the Renaissance.

Although many students have not been exposed to the African-Americans' role in the Renaissance, Smith says, "We care about our history. It is an important part of our growth and culture. If the information is presented in an honest way to our youth, they will be like sponges — wanting more and more because it is their history."

Early agrees about the institute's eventual impact on youth. By being involved with the institute, he says, "Washington University has an opportunity to have an impact on kids early in the educational process. Any time an institution can have that kind of an impact, it's an important venture."

Teachers who have participated in the institute "can make the Harlem Renaissance a very lively and vibrant study for kids," says Early, who created the academic component for the institute and was instrumental in the NEH's support of the project. "The youths can really enjoy studying this important part of American social history."

—Carolyn Sanford



## Introducing new faculty members

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

**Douglas B. Dowd**, assistant professor of fine arts and director of the School of Fine Arts' Core Program, comes to the school from the Hamilton Press in Cleveland, Ohio, where he was studio director. In 1983 he received his bachelor's degree in history, cum laude, from Kenyon College in Gambier, Ohio. He conducted graduate study in printmaking at New York University in 1985 and received a master's degree in the same field from the University of Nebraska-Lincoln in 1989. In 1991 he was a Rotary International Postgraduate Scholar at the Nova Scotia College of Art and Design in Halifax, Nova Scotia.

**William A. Geary II**, M.D., Ph.D., assistant professor of pathology, comes to the Washington University School of Medicine from the University of Virginia Health Sciences Center in Charlottesville, where he was a resident in anatomic and clinical pathology. He received his bachelor's degree in zoology and neurobiology from Iowa State University in 1979, his doctorate in pharmacology from Washington University in 1983 and his medical degree from the University of Virginia School of Medicine in 1987.

**Marin H. Kollef**, M.D., assistant professor of medicine in the Division of Pulmonary and Critical Care, comes to the School of Medicine from Fitzsimons Army Medical Center in Aurora, Colo. At the center, he was director of the medical intensive care unit in the pulmonary disease and critical care division. He received his bachelor's degree in mathematics from the U.S. Military Academy in West Point, N.Y., in 1979, and his medical degree from the University of Rochester School of Medicine and Dentistry in 1983.

**Neithalath M. Kumar**, Ph.D., professor of mathematics, comes to Washington University from the Tata Institute of Fundamental Research in Bombay, India, where he was an associate professor. In 1970 he received his bachelor's degree in mathematics from Kerala (India) University and his master's degree in mathematics from the Indian Institute of Technology in Kharagpur, India, in 1972. He received his doctorate in mathematics from Bombay University in 1981. A fellow of the Indian Academy of Sciences, he is the recipient of the 1992 B. M. Birla Prize for Mathematics.

**Eric J. Richards**, Ph.D., assistant professor of biology, comes to Washington University from the Cold Spring Harbor Laboratory in New York, where he was a staff investigator. The author of several articles, Richards received his bachelor's degree in anthropology and molecular biology in 1982 from Vanderbilt University in Nashville, Tenn. He received his doctorate in genetics from Harvard University in Cambridge, Mass., in 1989.

## Former University glass blower Harry Huth dies

**Harry Huth**, a former Washington University glass blower who also helped produce radioactive material for the atomic bomb while working at the University, died in his sleep July 4 at his home in Affton. He was 75.

Funeral services were held July 7 at Kutis Funeral Home, 10151 Gravois Road in Affton.

Huth was a glass blower at Washington from 1940 to 1984, when he retired. His work on the atomic bomb was classified and included transporting top-secret documents from St. Louis to Chicago.

As a glass blower at Washington, Huth helped produce complicated scientific equipment for science and medical school faculty. He also exhibited some of his work.

Huth is survived by his wife Irene Huth, of Affton; a sister, Lavern Raber of St. Louis; and four grandchildren.

# For The Record

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

## Of note

**Phillip L. Gould**, Ph.D., Harold D. Jolley Professor and chair of civil engineering, received the 1993 Outstanding Professional Engineer in Education Award from the Missouri Society of Professional Engineers. The award was presented at the society's annual dinner held at the Sheraton Westport Inn in St. Louis. ...

During the Combined Otolaryngological Spring Meetings held in Los Angeles, Calif., **Jay F. Piccirillo**, M.D., assistant professor of otolaryngology and director of the department's clinical outcomes research office, received the 1993 Junior Faculty Research Award from the American Laryngological Association. He was cited for his research leading to the development of a new clinical-severity staging system for cancer of the larynx. ...

**Catherine Bickle Schlegel**, a graduate student in psychology, received a Gina Finzi Memorial Student Summer Fellowship from the Lupus Foundation of America. The fellowship fosters interest in basic, clinical or psychosocial research in lupus erythematosus. Schlegel is working with **Edwin B. Fisher Jr.**, Ph.D., professor of psychology and director of the Center for Health Behavior Research, and **Leslie E. Kahl**, M.D., assistant professor of medicine. ...

**Elizabeth M. Smith**, Ph.D., associate professor of psychiatry, **Carol S. North**, M.D., assistant professor of psychiatry, and **Edward L. Spitznagel**, Ph.D., professor of mathematics and of biostatistics, received the 1993 American Academy of Clinical Psychiatrists' Clinical Research Award for best published paper of the year. Their paper, published in the June 1992 issue of the *Annals of Clinical Psychiatry* journal, was titled "A Systematic Study of Mental Illness, Substance Abuse and Treatment in 600 Homeless Men." As first author, Smith has been invited to present the paper at the academy's October meeting in Chicago. ...

**John-Stephen Taylor**, Ph.D., associate professor of chemistry, received the 1993 St. Louis Award from the American Chemical Society. He was recognized for his contributions toward the understanding of sunlight-induced genetic mutations and skin cancer. He received the award during the society's banquet held at the Hyatt Regency Hotel at Union Station. At the St. Louis Award symposium recently held at Washington University, Taylor presented a paper titled "Unraveling the Molecular Pathway Between Sunlight and Skin Cancer."

## Speaking of

During the National Convention of Pastoral Musicians held in St. Louis, Mo., **Kathleen A. Bolduan**, Ph.D., presented a talk titled "The Rhythmic Interpretation of Gregorian Chant." ...

At the Conference on Religion and the Environment held in Washington, D.C., **Kenneth Chilton**, deputy director of the Center for the Study of American Business, presented a paper titled "Everyone Knows That 'Recycling is the Answer,' But What is the Question?" ...

**Bruce Fegley**, Ph.D., associate professor of earth and planetary sciences, presented an invited talk on "Experimental Studies of the Rate of Pyrite Decomposition on the Surface of Venus" during the American Geophysical Union's meeting held in Baltimore, Md. ...

At the International College of Chest Physicians meeting held in Amsterdam, Netherlands, **Daniel M. Goodenberger**, M.D., assistant professor of medicine, presented a paper titled "Incidence and Timing of Pleurisy After Therapeutic Embolization of Pulmonary Arteriovenous Malformations." ...

Several faculty members in the Department of Education presented papers at the American Educational Research Association's annual meeting held in Atlanta, Ga. **Bryce B. Hudgins**, Ph.D., professor and chair, and **Madonna Riesenmy**, Ph.D., adjunct assistant professor, presented a paper titled "Children's Self-directed Critical

Thinking in Elementary Physical Science" as part of a poster session on children's science learning. They were assisted by Washington University alumni **Debra Ebel**, Ph.D., and **Sybil Mitchell**, Ph.D., as well as graduate students **Christine Klein** and **Virginia Navarro**. **Louis M. Smith**, Ph.D., professor, presented an invited address titled "Living Lives, Studying Lives, Writing Lives: An Educational Potpourri or Pot au Feu?" to Division K, Teaching and Teacher Education. He also chaired and was a discussant at two symposia titled "Shakespeare and Company's Institute for Teachers: A Philosophy, Pedagogy, Poetics and Practice of Teaching Shakespeare" and "Action Research: Toward an International Perspective." **Lauren Sosniak**, Ph.D., associate professor, was program chair for Division B, Curriculum Studies. She received 185 proposals and worked with 153 reviewers to create the division's 42 sessions. ...

**Scott Hultgren**, Ph.D., assistant professor of molecular microbiology, gave an opening lecture during the Sixth European Workshop Conference on Bacterial Protein Toxins held in Stirling, Scotland. ...

During a conference on "Human Rights Approaches to Environmental Protection in the Commonwealth and Beyond" held at the Commonwealth Institute in London, **A. Peter Mutharika**, J.S.D., professor of law, delivered a paper titled "Achieving Human Governmental Rights Under the North American Free Trade Agreement." ...

**Martha N. Ozawa**, Ph.D., Bettie Bofinger Brown Professor of Social Policy, and **Michael Sherraden**, Ph.D., Benjamin E. Youngdahl Professor of Social Development, were discussants at the "Seminar on Welfare Systems in Mexico, Canada and the United States." The seminar was held at the Department of Social Security in Mexico City. ...

At the University of Washington, **William Merritt Sale**, Ph.D., professor of classics and of comparative literature, presented a seminar titled "Avdo Mejedovich and the *Cantar de Mio Cid*: Mathematical Proof of Oral Composition." The seminar, part of a spring quarter conference on "Orality and Literacy," incorporated the annual meeting of the Celtic Studies Association. ...

**Robert L. Thorp**, Ph.D., associate professor and chair of art history and archaeology, presented two papers titled "Chinese Archaeology: Present and Future" and "The Goals and Methods of Art History and Archaeology" at an international conference titled "Chinese Archaeology Enters the 21st Century" held at Peking University. He was the only American participant to address the plenary session.

## On assignment

**Kevin Herbert**, Ph.D., professor emeritus of classics, has been appointed to the International Journal of the Classical Tradition's editorial board. ...

## Robert Walker receives Leonard Medal

**Robert M. Walker**, Ph.D., McDonnell Professor of physics and director of the McDonnell Center for the Space Sciences, is the 1993 recipient of the Meteoritical Society's Leonard Medal. Walker received the award during the society's annual meeting recently held in Vail, Colo.

Walker became involved in his first extraterrestrial project as a graduate student at Yale University. Since then he has conducted extensive research on lunar samples, meteorites and, most recently, interplanetary and interstellar dust particles. The study of interstellar grains in the laboratory is a new field of astrophysics that Walker considers an increasingly important part of contemporary meteorite research.

Walker is one of the pioneers of fission track studies — a method of dating minerals based on scars left by cosmic radiation. The Meteoritical Society citation refers to Walker as the father of the application of track studies to meteorites and lunar rocks.

In addition to recognizing Walker's many direct contributions to the field of meteoritics, the society cites that he "is

**Carlos Perez**, M.D., professor of radiology, served as chairman for an international symposium on brachytherapy held in St. Louis. The symposium, the third on this subject, attracted more than 200 physicians from the United States, Canada, Europe, India, Latin America and Japan. ...

**Peter Riesenberger**, Ph.D., professor emeritus of history, was visiting professor in the history department at the National University of Taiwan in Taipei. While there, he lectured at the Academia Sinica on "Citizenship in the Western Tradition, Then and Now" and addressed the annual dinner of The Lincoln Society of Taipei. He also received the 1993 Annual Missouri Conference on History Book Award for his book titled *Citizenship in the Western Tradition*. ...

**Marilyn Ryan**, associate director of the Career Center, completed a one-year term as president of the Higher Education Center's Women's Program Council, an organization formed in 1973 to provide professional development for local women administrators in higher education. Ryan organized the council's first program planning retreat. **Karen Levin Coburn**, associate dean for student development and a founding council member, facilitated the retreat. ...

**Mary Watkins**, research associate professor of occupational therapy, is a member of the World Confederation of Physical Therapists' scientific committee, which is planning the 1995 World Confederation Congress to be held in Washington, D.C.

## Etc.

An exhibit curated by **Stephen Leet**, visiting assistant professor of architecture, was shown at the National Institute for Architectural Education in New York City. The exhibit, titled "The Architect and the Photograph," features the works of Jose Antonio Coderch, Charles Eames and Giuseppe Pagano. After opening in New York, the exhibit is now being shown at the Graham Foundation for Advanced Studies in the Fine Arts in Chicago.

## To press

The first 1993 issue of the *Psychological Inquiry* journal was chiefly devoted to the work of **Jane Loevinger**, Ph.D., William E. Stuckenberg Professor of Human Values Emerita. She wrote the initial article titled "Measurement of Personality: True or False," which is followed by commentaries from 10 other psychologists and Loevinger's reply.

## 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. Items must not exceed 75 words. For information, call Carolyn Sanford at 935-5293.*

almost solely responsible for building up the McDonnell Center for the Space Sciences with its excellent instrumentation."

Since 1966, the Leonard Medal has been awarded annually to a scientist with an outstanding record of accomplishments in original research in the broad field of meteoritics and closely allied fields. Particular note is paid to those whose most significant work lies between major classical disciplines such as mathematics, astronomy, physics, chemistry, mineralogy and geology.

The award is named for the late Frederick C. Leonard, professor of astronomy and founder of the astronomy department at the University of California, Los Angeles (UCLA), and a founding member of the Meteoritical Society. Leonard assembled an extensive meteorite collection that he presented to UCLA before his death in 1960.

During the society's annual meeting, Walker addressed a plenary session and he will submit a paper based on his address to the Meteoritics journal.



# 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.

### Academic Support Specialist

940004. *Biology*. Requirements: High school graduate, some college preferred; knowledge of Macintosh Microsoft Word, WordPerfect and other software to produce high-quality and accurate work; ability to produce high volumes of work consistently; master use of electronic mail and message distribution to facilitate communication; be flexible and have ability to change and adapt to new policies and procedures; meet deadlines and produce quality work under pressure; be a good team member and help even out office workload when a significant variation in average workload is encountered by any staff member; typing 50 wpm with accuracy. Clerical tests and three letters of recommendation required.

### Department Secretary

940005. *Alumni and Development Programs*. Requirements: Specialized secretarial and business training; minimum of two years office experience, reflecting excellent word processing, typing 40 wpm with accuracy and organizational skills. Individual should have a strong command of the English language and must be able to deal with multiple priorities with minimal supervision. Overtime, including nights, weekends, etc., is essential, as is a good personality and good grooming. Clerical tests and three letters of recommendation required.

### Technical Associate/Programmer Part-time

940006. *Student Educational Service*. Requirements: Two years of college, bachelor's degree preferred. PC data base management; develop and maintain data base file systems; investigation of student information to enter, edit and correct in data systems; implement and maintain student tracking data base file system for reporting purposes; generate statistical data and reports; use FOCUS to generate on-line reports for student data; input and maintenance of department budget, staff salary and appointments on-line; provide technical support to staff and students using computer; develop and install a computer program suitable for mailing lists and labels; install and evaluate new software program packages; manage hard drive disk space; type grant report, letters, mailings, and other related projects as assigned. Resume and three letters of recommendation required.

### Department Secretary

940007. *Public Affairs*. Requirements: Some college, bachelor's degree preferred; understanding of academic environment; ability to deal with multiple priorities; ability to work with faculty and students as well as staff. Duties: Administrative work for director; prepare quarterly reports of office activities; maintain records of expenses/disbursements for all special programs; editorial services mailings and records; honors programs and mailings; departmental billings; routine mailings; correspondence; telephone duties; typing 50 wpm with accuracy. Clerical tests and three letters of recommendation required.

### Cashier/Sales Clerk

940009. *Campus Stores*. Requirements: High school graduate, some college preferred; basic math skills and ability to operate a 10-key adding machine; one year of electronic register experience preferred; previous selling experience desired; good physical condition for recurrent lifting of moderately heavy items; excellent attendance record; must be able to work evenings and Saturdays; typing 20 wpm with accuracy. Clerical tests and three letters of recommendation required.

### Career Resources Librarian

940013. *School of Business*. Requirements: Creative person with strong organizational skills; degree or background in library science and/or library/research experience preferred; strong customer service orientation very helpful. Resume and three letters of recommendation required.

### Clerk

940014. *Printshop*. Requirements: High school graduate, some college preferred. Duties: Bookkeeping (processing invoices, computer data entry, monthly reports); assist in bindery (wrapping, folding, collating, stitching, etc.); telephone receptionist; routine clerical tasks (filing negatives and proofs, job tickets, etc.). Application and three letters of recommendation required.

### Administrative Assistant

940016. *Alumni and Development Programs*. Requirements: Specialized secretarial and business training; typing 50 wpm with accuracy; experience with PC word processing; five years of office experience; ability to deal effectively and sensitively with senior administrators, faculty, alumni, parents and prospective students; maintain confidentiality; excellent attendance record; excellent command of English language; ability to handle multiple project-oriented tasks with strict deadlines requiring a high degree of organization and thought; available to work overtime as needed; perform some local courier work; prefer someone experienced with Macintosh computers, including knowledge of Microsoft Word, Pagemaker and Excel; bookkeeping knowledge preferred as well. Clerical tests and three letters of recommendation required.

### Secretary to Teacher Education/Student Services

940021. *Education*. Requirements: Some college, bachelor's degree preferred; organizational and verbal skills a must; ability to handle multiplicity of tasks in busy office; self-starter and independent worker; typing 50 wpm with accuracy. Clerical tests and three letters of recommendation required.

### Internal Auditor/EDP Specialist

940022. *Accounting Services*. Requirements: Bachelor's degree; three to five years auditing experience, preferably with emphasis in EDP auditing; ability to develop clear and concise audit workpapers and audit reports; proven ability to work harmoniously with people and to communicate effectively orally and in writing with all levels of faculty, management and operation staff; awareness of the use of flowcharting techniques and computer capabilities as audit tools. Resume and three letters of recommendation required.

### Systems Manager

940023. *Architecture*. Requirement: Bachelor's degree. Duties: VAX systems management; MAC systems management; SGI systems management; network management; managing help desk; research projects - management of urban data base; assisting with grant proposals; management of student computer work space; management skills listed above all include: systems maintenance, troubleshooting, backup, security and software research. Resume and three letters of recommendation required.

### Accounting/Purchasing Assistant

940024. *Computer Science*. Requirement: High school graduate. General knowledge of electronics helpful, not required. Knowledge of FIS would be helpful, not required. Clerical tests and three letters of recommendation required.

### Administrative Secretary

940026. *International Studies*. Requirement: Some college, bachelor's degree preferred. Provide general secretarial support to associate director; assist in the preparation of newsletters, reports, grant proposals, creation of data bases, budgetary and other office-related responsibilities; arrange

meetings, seminars and other events; must have excellent communication and organizational skills; must know how to use a Macintosh computer; knowledge of the word processing programs for the MAC would be a plus; Pagemaker, Filemaker Pro, Canvas, Excel and Microsoft Word; knowledge of FIS accounting system also is a plus; typing 55 wpm with accuracy. Clerical tests and three letters of recommendation required.

### Departmental Secretary

940027. *Alumni and Development Programs*. Requirements: Associate's degree or equivalent knowledge; specialized secretarial and business training; three years general office experience; typing 50 wpm with accuracy; good command of English; must be alert, well-spoken; able to deal with multiple priorities with minimal supervision; mature, well-groomed, pleasant; able to work well and relate easily with others. Clerical tests and three letters of recommendation required.

## 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.

### Coding Specialist - Diagnostic/Medical

930712-R. *Internal Medicine*. Schedule: 10 p.m. to 7 a.m., including some weekends. Requirements: High school graduate or equivalent; two years related CPT and ICD-9 coding experience preferred; accredited records technician or similar clinical training or skill preferred.

### Data Entry Operator I

930875-R. *Surgery*. Schedule: Temporary part-time position. Flexible scheduling, including days, evenings and weekends. Requirements: High school graduate or equivalent; computer experience helpful; typing 30 wpm.

### Project Assistant

930917-R. *Internal Medicine*. Requirements: Bachelor's degree in business administration or related field with three years clinical training and experience with medical records coding; strong communication, interpersonal and analytical skills.

### Medical Research Technician

930941-R. *Pediatrics*. Schedule: Temporary position until September. Requirements: Bachelor's degree with experience in general laboratory techniques, including tissue culture and molecular biology techniques; must be able to work semi-independently.

### Medical Secretary II

930959-R. *Pediatrics*. Requirements: High school graduate or equivalent with a thorough knowledge of medical terminology; typing 50 wpm and experience with CRT and WordPerfect; four years work-related experience preferred.

### Medical Research Technologist

930972-R. *Pathology*. Requirements: Bachelor's degree with two to five years laboratory experience, including some work with isotopes and small animals.

### Medical Research Technician

930981-R. *Genetics*. Requirements: Bachelor's degree with background in chemistry or biology; should have the ability to learn molecular biology techniques, including PCR.

### Laboratory Technician - Research

940010-R. *Genetics*. Requirements: Two years college; must be thorough and detail-oriented and have the flexibility to adapt to new protocols. Will be carrying out experiments in human molecular genetics. Should be able to work independently and have interpersonal skills to work with others.

### Medical Research Technologist

940054-R. *Lipid Research*. Schedule: Full time, including some weekends for experiments. Requirements: Bachelor's degree; at least five years experience as a technician, including experience with animals (rodents), preferred.

### Medical Research Technician

940071-R. *Ophthalmology*. Requirements: Bachelor's degree with some laboratory experience; good manual dexterity and eagerness to learn new techniques. Experience in tissue/cell culture and molecular biology techniques preferred.

### Medical Research Technician

940073-R. *Ophthalmology*. Requirements: Bachelor's degree in chemistry or biochemistry with one year experience in laboratory work; should be familiar with computers and have good recordkeeping and communication skills; must be willing to handle animal tissues.

### Nursing Specialist

940074-R. *Pediatrics*. Requirements: BSN, MSN/PNP preferred with two years experience in hematology/oncology; must have excellent interpersonal skills to develop ongoing therapeutic relationships with patients and families served by the department.

### Medical Research Technician

940089-R. *Biochemistry*. Schedule: Part-time, 22.5 hours a week; days negotiable. Requirements: Bachelor's degree; must have the ability to perform biochemistry and molecular biochemistry experiments under guidelines from supervisor, using knowledge of standard principles, theories, concepts and techniques.

### Medical Research Technician

940097-R. *Radiation oncology*. Requirements: Bachelor's degree with college-level coursework in biology and chemistry or two years experience working in a laboratory. Will perform experiments as directed by the investigators.

## Waterston — from page 1

Waterston's laboratory can sequence and interpret just over 1 million chemical bases of the nematode's genetic code each year. With the advanced software and automation, researchers will be able to elucidate 10 million to 15 million chemical bases annually.

A 1965 graduate of Princeton University, Waterston received his medical and doctoral degrees in 1972 from the University of Chicago. He served his internship in pediatric medicine at Children's Hospital Medical Center in Boston and was an American Cancer Society and Muscular Dystrophy Association postdoctoral fellow at the Medical Research Council Laboratory of Molecular Biology in Cambridge. He joined the School of Medicine in 1976 and returned to Cambridge as a Guggenheim Fellow in 1985 for a sabbatical year.