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PET helps identify optimal therapy for breast cancer

Approximately one woman in nine in the United States will develop breast cancer in her lifetime. Research has shown that 60 percent of those with the disease respond to hormonal therapy. The problem for doctors is determining which patients will respond and which ones need more aggressive treatment, such as chemotherapy.

Discerning between the two groups and prescribing the right care can have a profound impact on the quality of a patient's life. But how should doctors make these decisions?

Researchers at the School of Medicine, in collaboration with researchers at the University of Illinois, used imaging technology called positron emission tomography (PET) to help diagnose breast tumors that are likely to respond to hormone therapy in women with spreading, or metastatic, disease. The study was supported by the National Institutes of Health.

In a recent issue of *Clinical Cancer Research*, the investigators reported that their method, called FES-PET (fluoro-estradiol-PET), predicted tumor response to hormone therapy in patients with advanced breast cancer. All 43 of the women studied had locally advanced or metastatic breast cancer that was tracked through a different PET imaging technique. The combination of the two imaging methods enabled more definitive diagnoses and better care for metastatic disease. It also could yield a more precise road map for the treatment of future breast cancer patients, said Joanne E. Mortimer, M.D., associate professor of medicine and lead author of the study.

"If we're able to predict who will benefit from hormonal therapy, that's an important quality-of-life issue," Mortimer said. "These women can be treated with hormones, and they won't need chemotherapy."

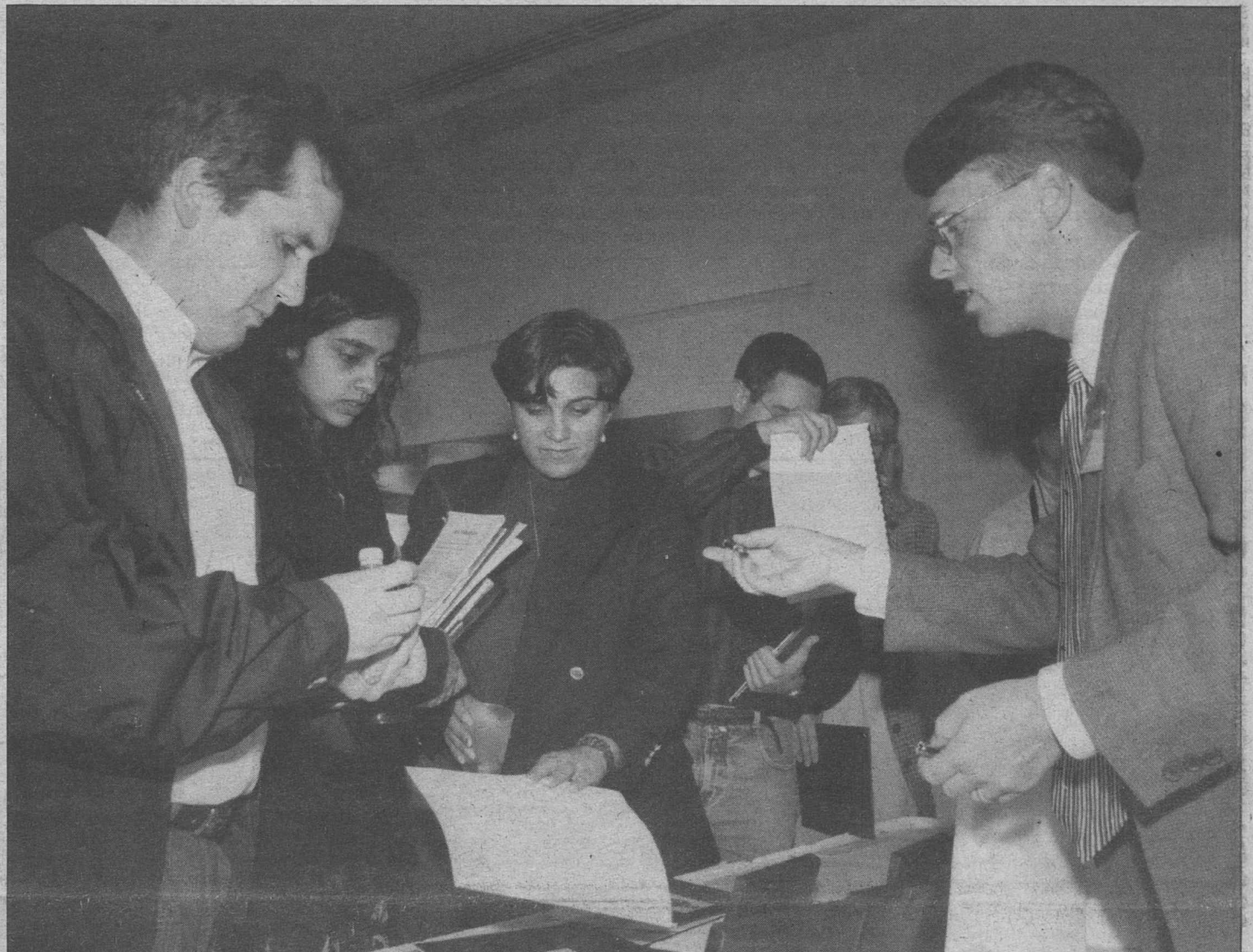
Chemotherapy uses highly toxic drugs that, while killing cancer cells, often wreak havoc on normal cells' activities. Radiation therapy also is needed and may lead to profound swelling in the arms and repeated infections, Mortimer said. If breast cancer patients could remain on hormonal therapy, they might avoid such ordeals, she added.

Identifying functional receptors

Fluoro-estradiol-PET appears to measure the estrogen dependency of certain breast cancers, Mortimer said. Because 60 percent of breast tumors actually grow in the presence of estrogen, FES-PET uses a radioactive chemical, or tracer, that mimics the hormone. Tumors incorporate FES if they have functional estrogen receptors.

Determining whether these receptors

Continued on page 5



Dave Oscarson, right, of Renaissance Pen Co. discusses an idea for a line of luxury fountain pens with business students, from left, Steve Mentzer, Sandhya Baliga and Nusheen Javadizadeh. Oscarson was one of 14 entrepreneurs to discuss their new-business ideas Oct. 30 at the debut of the Olin Hatchery.

Birthplace of new businesses

Olin Hatchery, an entrepreneurship program, makes its debut

The event had the atmosphere of a science fair for grown-ups crossed with an opening night off-Broadway. But blue ribbons and rave reviews were not at stake. Instead, business dreams, capital and careers were riding on the recent premiere of the Olin Hatchery.

An entrepreneurship program of the John M. Olin School of Business, the Hatchery debuted Oct. 30 with a forum and exposition featuring 14 entrepreneurs hawking their new-business ideas to more than 200 business students in Simon Hall. The entrepreneurs — including individuals from Chicago, Indianapolis, St. Louis and Beverly Hills, Calif. —

each aimed to attract a team of students that will work throughout the spring semester to create a business plan for the entrepreneur's idea. The team, three or four students at the junior, senior or master's of business administration level, then will present the plan next spring for critical review by a panel of experienced investors.

Russell D. Roberts, Ph.D., director of the business school's Management Center, introduced each entrepreneur at the forum in May Auditorium. Roberts created the Hatchery name and concept and directs the program through the Management Center.

Each entrepreneur had six minutes to present his or her idea at the forum. Ideas included patented health-care devices and products; a network of auto-body shops; a for-sale-by-owner real estate service; an on-line market-information service for Latvia, Lithuania and Estonia; CD-ROM production; an Internet security system; expansion of an industrial asset liquidation company; a line of luxury fountain pens; a veterinary care corporation; and a combination eatery/learning center/bookstore. Roberts created a festive atmosphere between presentations by tossing raisins and peanut-butter cups into the crowd.

Continued on back page

American writer John Updike to deliver Assembly Series lecture

Distinguished American writer John Updike will give an Assembly Series lecture titled "Elevenes With John Updike" at 11 a.m. Wednesday, Nov. 20, in Graham Chapel. The lecture is free. Public seating may be limited.

Updike will sign books from 4 to 5 p.m. Tuesday, Nov. 19, in the Campus Bookstore in Mallinckrodt Center.

Updike is the author of 17 novels and numerous short stories and poems. His chief recognition comes from his tales of contemporary American life. The "Rabbit" cycle, four novels chronicling the life of character Rabbit Angstrom amid the backdrop of a rapidly changing America, is among his most successful works.

Updike won a Pulitzer Prize in 1982 for "Rabbit is Rich" and again in 1991 for "Rabbit at Rest." In 1989, he was awarded the prestigious National Medal of Arts in a White House ceremony. Updike's more recent works include "In the Beauty of the Lilies," "The Afterlife and Other

Final fall lecture

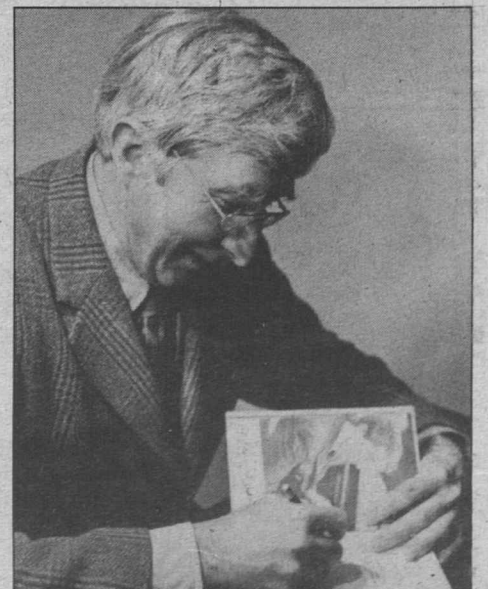
Roberta Cooper Ramo, J.D., past president of the American Bar Association, will deliver the last Assembly Series lecture this semester. (See story on page 5.)

Stories," "Brazil" and "Memories of the Ford Administration, A Novel."

Updike graduated from Harvard University in 1954. A year later, he attended the Ruskin School for Drawing and Fine Art in Oxford, England. He first gained notoriety in the 1950s while writing for *The New Yorker*. Updike is the father of four children.

The lecture will be presided over by Wayne Fields, Ph.D., professor of English and director of the American Culture Studies Institute in Arts and Sciences.

For information, call (314) 935-5285.



John Updike will sign books from 4 to 5 p.m. Tuesday, Nov. 19, in the Campus Bookstore in Mallinckrodt Center.

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Study finds most women are unaware of cardiovascular benefits of hormone-replacement therapy

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Football coach Larry Kindbom infuses "the ultimate Division III philosophy" into his players

Remembering a legend 7

Daylong event will pay tribute to the life and career of the late Oliver H. Lowry, M.D., Ph.D.

Medical Update

Women unaware of therapy's heart-protecting effects

As the first baby boomers turn 50 this year, more than a million women will have to decide whether to take hormone-replacement therapy (HRT) at menopause. But a recent survey finds that women's reasons for favoring the therapy do not jibe with those of doctors. Even well-educated women, the study finds, fail to appreciate that the hormones may ward off heart disease, the No. 1 killer of postmenopausal women.

"Doctors seemed to know about the cardio-protective effects of hormone-replacement therapy, but this information had not filtered down to the patients in our study," said lead author Donna B. Jeffe, Ph.D., research associate in medicine. "I find that surprising, given that our group of patients was very well-educated."

Only 29 percent of the 82 women in Jeffe's study who were using or had used HRT mentioned cardio-protection as a

contributing reason. None of nine non-users seemed aware of this benefit.

The findings were published in a recent issue of *Menopause*. Jeffe collaborated with S. Michael Freiman, M.D., clinical professor of obstetrics and gynecology, and Edwin B. Fisher Jr., Ph.D., professor of psychology in Arts and Sciences, research professor of medicine and director of Washington University's Center for Health Behavior Research, of which Jeffe is a member.

"We professionals sometimes overestimate how much people know about their health," Fisher said. "We need to make sure we inform patients about the risks they face and what they can do about them."

A training grant from the National Heart, Lung and Blood Institute at the National Institutes of Health supported the research.

Epidemiological evidence and data from the Postmenopausal Estrogen/

Progestin Interventions Trial suggest that HRT protects women against the heart disease that threatens health and life after menopause. So Jeffe set out to learn whether prevention of heart disease figures into women's reasons for taking HRT.

A Gallup survey, reported in 1994, explored women's reasons for not taking HRT. "But research is lacking on women's own reasons for taking the hormones," Jeffe said.

In 1994, Jeffe surveyed 91 women between the ages of 37 and 60 — the mean age was 51. Only women who had failed to menstruate in the previous 12 months were included. Fifty-three percent had reached natural menopause, 44 percent had had hysterectomies and 3 percent were menopausal after chemotherapy for breast cancer. The majority (90 percent) of the women were current or former users of HRT, in contrast to the national norm for this age group of 62 percent in 1992.

The participants lived within driving distance of St. Louis — in rural, urban and suburban areas of eastern Missouri and western Illinois. Nearly one-fifth were black, and two-thirds were college graduates.

Each woman completed a 24-page questionnaire and underwent a face-to-face interview with Jeffe. As well as giving their demographic characteristics, the participants revealed their reasons for using or not using HRT, their personal and family medical histories, and information about their quality of life.

Other reasons listed

Of the 82 women in the group who were using or had used HRT, 61 percent listed therapeutic reasons, such as relief of hot flashes, vaginal dryness, sleep disturbance and mood swings.

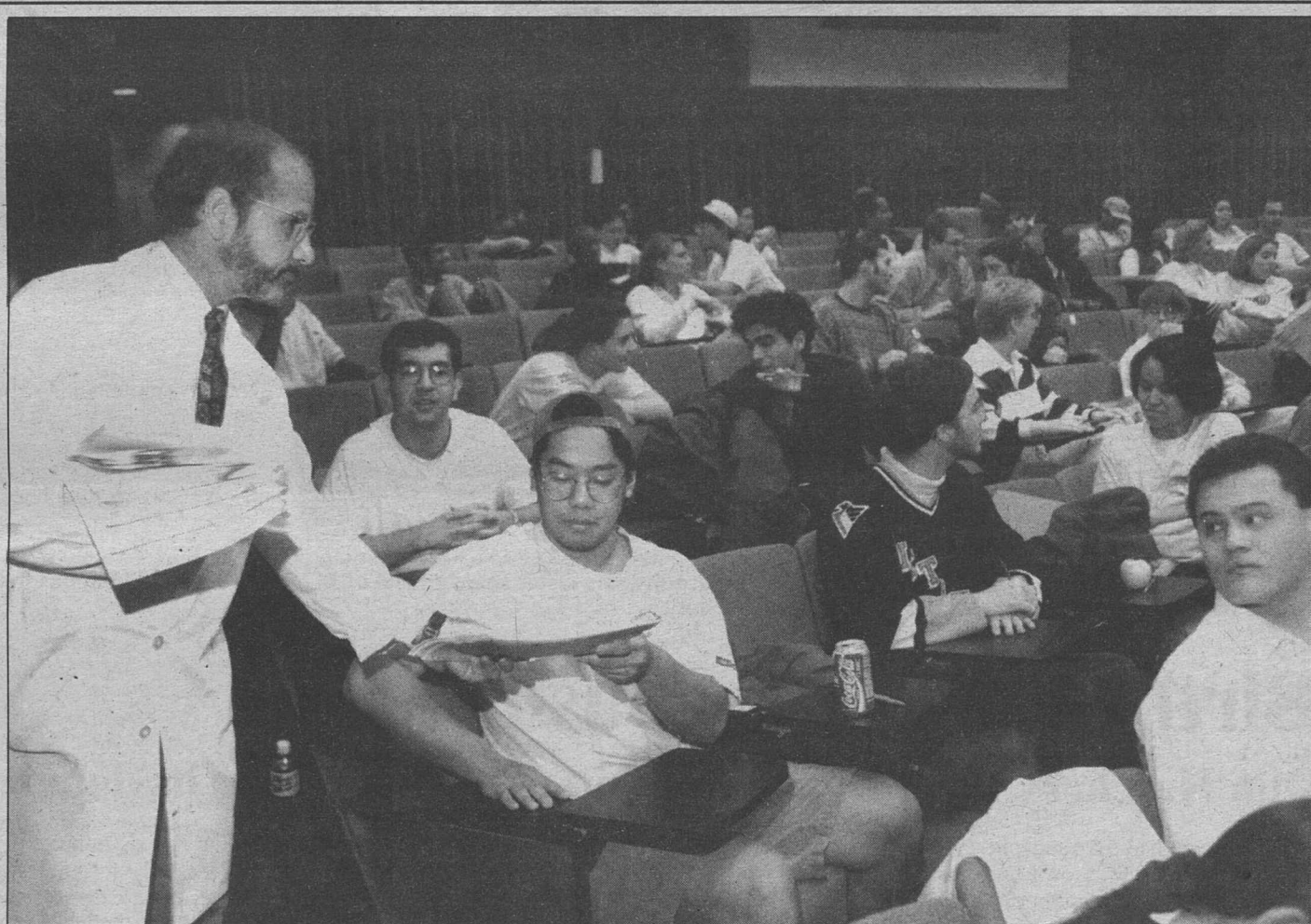
Fifty-five percent listed preventive reasons, the most common being prevention of osteoporosis (49 percent of those using HRT). But only 29 percent mentioned prevention of cardiovascular disease. And though women with family histories of heart disease mentioned this reason more often than women without this risk factor, only 22 of the 71 women with other risk factors for heart disease — high blood pressure, high cholesterol level, diabetes, current smoker, previous heart attack — mentioned cardio-protection as a reason for using HRT.

Surprisingly, 20 percent of the HRT users listed no therapeutic or preventive reasons. Eighty-one percent of this subgroup reported a surgical menopause, and they were taking the hormones solely on their doctors' advice.

Only nine women among the 91 surveyed had never used HRT. Seven listed fear of cancer or having breast cancer as the reason, and the other two were unclear about the appropriateness for them of HRT.

Overall, Jeffe was surprised that most of the 91 participants failed to mention the heart-protecting effects of hormone therapy. "If women are not made aware of important issues," she said, "they can't be expected to take that information into consideration when they decide whether or not to use HRT."

— Linda Sage



First trimester tests

During the first trimester exam period for second-year students, Samir El-Mofty, Ph.D., associate professor of pathology and of otolaryngology, hands a pathology test to Patrick Yue. Second-year students took exams from Oct. 30 to Nov. 6.

Atkinson, Olney elected to prestigious Institute of Medicine

Two School of Medicine faculty members have been elected to the prestigious Institute of Medicine of the National Academy of Sciences. They are John P. Atkinson, M.D., the Adolphus Busch Professor and chair of the Department of Medicine, and John W. Olney, M.D., professor of psychiatry and of neuropathology.

Atkinson, who also is a professor of molecular microbiology, is renowned for his research into the structure, function and genetics of the complement system, a group of proteins critical to the immune response.

In 1985, Atkinson discovered a complement protein called membrane cofactor protein (MCP), which protects cells from attacks by the body's immune system and also acts as the receptor for the measles virus. His research has sparked efforts to create transgenic animals that express human MCP so organs from those animals might be transplanted into humans without fear of acute rejection.



John P. Atkinson

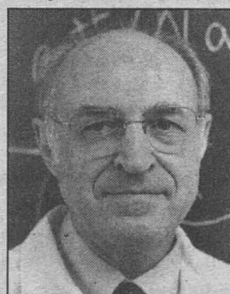
Atkinson joined the Washington University faculty as an assistant professor of medicine and head of the Division of Rheumatology in 1976. He became a full professor in 1984 and chair of the Department of Medicine in 1992.

He received the Distinguished Teacher Award from Alpha Omega Alpha in 1991. This year, Atkinson received the Klemperer Award for research in connective tissue diseases from the New York Academy of Medicine.

Olney is known for pioneering work that helped establish glutamate as a major neurotransmitter in the brain. In the early 1970s, after discovering that glutamate can kill nerve cells in the brain by overstimulating them, Olney coined the term "excitotoxicity." He also hypothesized that glutamate excitotoxicity might play an important role in neurodegenerative diseases.

He proposed that excess glutamate released from brain cells overactivates receptors on other nerve cells, ultimately killing them. That insight set the stage for the later discovery that stroke and head trauma also release glutamate from neurons, setting off a cascade of events that accounts for much of the permanent damage associated with these conditions.

In his early research, Olney fed glutamate to animals and found it destroyed nerve cells in the brain. Because infant animals were especially sensitive to this neurotoxic action, he undertook a long battle that eventually caused the food industry to end its practice of adding glutamate to baby foods.



John W. Olney

Olney came to Washington University as a resident in psychiatry in 1964. He joined the faculty as an instructor in psychiatry and in 1977 became a full professor of psychiatry and of neuropathology. He was a recipient of the Wakeman Award for Research in Neuroscience in 1992 and the Charles A. Dana Foundation Award for Pioneering Achievement in Health in 1994.

Atkinson and Olney are among 55 new members whose elections were announced by the National Academy of Sciences in October. The Institute of Medicine helps advance health professions and health sciences and promotes research and development pertinent to health.

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Washington
WASHINGTON UNIVERSITY IN ST. LOUIS

Washington People

The Kindbom credo: positive mental attitude

Head football coach Larry Kindbom strolls through the Hayes Football Suite on the second floor of the Athletic Complex, casting about for something to add to his take on the Washington University Bears. "Now here's your story," Kindbom says, pointing to an oversized copy of a \$10,000 check made out to the University's general scholarship fund. The donor, Burger King Corp., recently honored senior fullback and co-captain Chad Jackson for his academic and athletic excellence. "Our students are unbelievable," Kindbom adds.

The same might be said of the coach himself.

Since coming to the University in 1989, Kindbom has taken a flailing football program and carefully built it into a winning one, boosting the Bears into the ranks of top-notch Division III competitors. Along the way, he has levitated players' spirits, infused them with positive philosophy and developed what many in the University community call a "phenomenal" recruiting program.

If there is magic at work here, it is the University's formula, Kindbom insists. "The school speaks for itself. Our students are vibrant, exciting and motivated. They are earning degrees that will last them a lifetime," he said.

On the playing field, many of these students are breaking records with Herculean power, speed and precision. Notable is last year's 9-1 record, the Bears' most successful season since 1948. This year, the Bears have posted four-consecutive road shutouts. Not since 1949 has a WU team produced four shutouts in a season.

Consider the nationally ranked defense, a record-setting quarterback, a litany of other achievements and individual career marks for every type of play from tackles to touchdowns.

With an overall WU record of 49-29, Kindbom has jumped into the history books as the University's all-time winningest coach. So far this decade, WU's .652 winning percentage is among Missouri's best for four-year football programs. In league play, the Bears have captured a share of the last three University Athletic Association (UAA) crowns.

Yet Kindbom remains cautious in the company of such statistics. "The players probably had their scripts written before the current season started. The obvious thought was that we'd go one step ahead to win them (games) all. We struggled early in the season," Kindbom said of the team's 6-3 overall record (3-1 in the UAA). "But we're still a good football team."

'A great motivator'

For Kindbom, winning takes on a definition much broader than what a scoreboard or a rash of statistics might reveal. The players' superlative work ethic, concentration on academics and positive mental attitude — the latter an integral component of the Kindbom philosophy — are tantamount to success.

"He is a great communicator with the ultimate Division III philosophy," said assistant coach Aaron Keen, a former WU record-setting quarterback and beneficiary — as both a player and colleague — of Kindbom's influence. "He's very knowledgeable on the Xs and Os of the game. A great motivator who knows how to push your buttons. He is well-liked, a ball of energy who has gotten the team to look at themselves, not always in light of the opponents."

This perspective translates into a self-reliance and confidence that Kindbom, from his first day on the job, has stressed among student-athletes. "Our guys are in the weight room at 7 a.m. in the middle of the summer," Kindbom said. "You don't work 365 days a year and consider yourself unsuccessful."

Added Keen: "All our players now have been recruited under Coach Kindbom's philosophy. They know his expectations."

Those expectations are defined, in part, by Kindbom's own formative coaching years. After serving for two years as assistant coach at Michigan's

Kalamazoo College — a Division III school where he had earned a bachelor's degree in political science and lettered for four years in football and baseball — Kindbom attended Western Michigan University. There, the Lancaster, Penn., native served as a graduate assistant coach for a season while completing his master's degree in physical education.

His next stop — Ohio State University to begin work on a doctorate — landed him in the office of Woody Hayes, the controversial football taskmaster who could quote the ancient Greeks in one breath and, in the next, explode with a volcanic temper.

"I walked into Woody Hayes' office to see if I could help out," recalled Kindbom, who decided against a law

The tables turned slowly for the Akron team, which won two games that year. Two years later, the team went to the playoffs, and Kindbom, eager to embrace a new challenge, snapped up the head coaching position at Kenyon College in Gambier, Ohio.

Six years of coaching the Lords — Kindbom also coached Kenyon's baseball team for four years and the golf team for one — gave Kindbom a solid foundation in Division III ball. That he successfully established and maintained competitive programs, however, never eclipsed his abiding concern for his players' academic pursuits.

The kinetic Kindbom came to Washington University in 1989, insisting that the down-trodden Bears "sweat

away" past defeats.

"Somehow, he manages to balance the right amount of intensity with the necessary calmness to be a head coach," said junior quarterback Thor Larsen, a business major who holds every significant passing mark at the University.

That composure was called into play late last month when the Bears traveled to the University of Rochester in New York. Two hours before kickoff, the Bears discovered that their equipment was missing from the bus.

While a scramble ensued to locate the gear, Kindbom kept the players loose, positive and engaged. He met with the coaches and maintained a productive, albeit unexpected, schedule.

The equipment was recovered in Atlantic City, N.J., and was returned to the team, which six hours later trounced Rochester 41-0.

Kindbom is known for caring deeply about his players, both on and off the field, and goes to

great lengths to ensure their well-being. When Larsen anguished over changing his major this year, Kindbom got involved and suggested that the consummate scholar-athlete cut practice to talk with individuals who could advise him.

'An eye on worthy and lofty goals'

Ever-present for every player, Kindbom has energized the University's entire undergraduate recruiting effort, possessing a knack for figuring out nearly any recruitment challenge, said John Berg, associate vice chancellor for undergraduate admission.

"Larry is inspirational, always upbeat, with an eye on worthy and lofty goals," Berg said. "He is a great teacher and coach who has the ability to connect with every student."

Kindbom is hoping to connect his son Kevin, a high school senior in Gambier, Ohio, with Washington University. The teen worked last summer at the School of Engineering and Applied Science and is considering attending the University. While college is a few years away for son Kyle, a high school freshman in Gambier, "he belongs at Washington University, too," asserted Kindbom.

The coach and his wife, Kate, who recently accepted a position in the University's admissions office, are the parents of a 3-year-old daughter, Kelsey.

In the St. Louis area, Kindbom's name holds sway for the community leadership roles he has embraced. He helped found the area's National Football Foundation/College Hall of Fame chapter in 1992. In 1994, he was given the Eddie Cochems Award, an inaugural honor that celebrated his contributions to the area's amateur football organizations.

He's an adviser to the campus chapter of the Fellowship of Christian Athletes. And Kindbom has been instrumental in reinstituting and organizing the Metropolitan Football Coaches Association, a local organization for area high school coaches. He also conducts local summer youth football camps.

"The more you give, the more you get back," Kindbom said of his efforts.

On that premise, the coach is experiencing a skyrocketing rate of return.

— Cynthia Georges



Coach Larry Kindbom discusses strategy with junior quarterback Thor Larsen (No. 8) and senior fullback Chad Jackson (No. 24).

"The more you give, the more you get back."

career to follow a desire to teach. "No sooner had I finished my story, Woody was on the phone with the dean of the law school, saying, 'I have a young man who wants to go to law school at Ohio State.'"

"I told him that this was not why I had come in and left the room. I got down the hallway when he called me back. I was reluctant to talk with him. I didn't know him, and I was naive," continued Kindbom. "I'm sure he liked the fact that I just got up and walked out. I think he sensed that there was a bit more to me than someone trying to get into the program. I had breakfast with him the next morning when he offered me the position."

"I learned a great deal in those two years," Kindbom said. Hayes' surprise punch unleashed on Clemson University middle guard Charlie Bauman at the close of the 1978 Gator Bowl notwithstanding, Kindbom added, "Woody was a tremendous individual who believed you win with people. He was an educator who ran the program like a small college."

Following a two-year stint as a graduate assistant coach for the Ohio State Buckeyes, Kindbom spent 1979 through 1983 as an assistant coach at the University of Akron in Ohio. Under head coach Jim Dennison, the team was transitioning from Division II to Division I and was straining in the face of stepped-up competition.

Dennison's handling of this changeover greatly impressed Kindbom, who bought into the coach's practice of positive mental attitude.

"The fans in Akron were upset that we weren't winning our games," Kindbom said. "Dennison brought in his coaching staff to tell us our priorities wouldn't change: 'First you have your families, then you have your teaching responsibilities and the players,' he said. He had run a very successful program. Now he was in the hot seat yet could still keep it all in perspective."

Calendar

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

Nov. 14-23



Exhibitions

"Joint Faculty Exhibition." Features works by 49 faculty members from the schools of Art and Architecture. Opening reception: 5-7 p.m. Nov. 15. Exhibition runs through Dec. 19. Gallery of Art, upper gallery, Steinberg Hall. Hours: 10 a.m.-4:30 p.m. weekdays; 1-5 p.m. weekends. (See photo on this page and story on page 6.) 935-4523.

"type/script: notebooks: an examination." An examination of the writer's notebook as function and as form. Through Jan. 15. Special Collections, Olin Library, Level Five. Hours: 8:30 a.m.-5 p.m. weekdays. 935-5495.



Films

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

Friday, Nov. 15

7 and 9:30 p.m. Filmboard Feature Series. "Crumb." (Also Nov. 16, same times, and Nov. 17 at 7 p.m.)

Midnight. Filmboard Midnight Series. "Real Genius." (Also Nov. 16, same time, and Nov. 17 at 9:30 p.m.)

Monday, Nov. 18

7 and 9 p.m. Filmboard Classic Series. "Gold Rush." (Also Nov. 19, same times.)

Tuesday, Nov. 19

6 p.m. Chinese Film Series. "The Wilderness (Savage Land)," with English subtitles. Room 219 South Ridgley Hall. 935-5156.

Friday, Nov. 22

7 and 9:30 p.m. Filmboard Feature Series. "Trainspotting." (Also Nov. 23, same times.)



Lectures

Thursday, Nov. 14

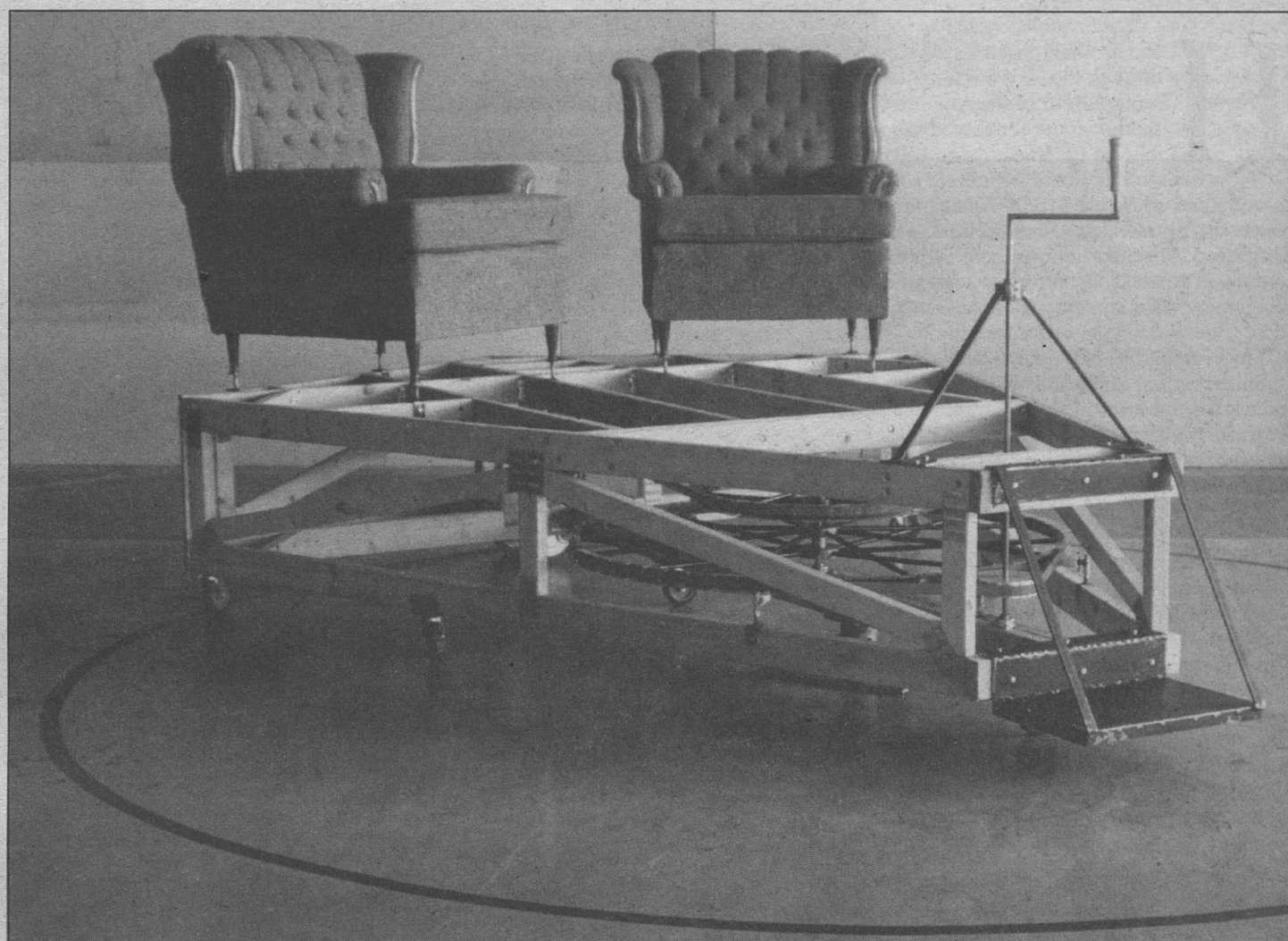
1:10 p.m. Social work lecture. "Models of Effective Social Intervention for Victims of Domestic Violence," Sarah Buel, special counsel, Texas District and County Attorneys Association. Brown Hall Lounge. 935-4909.

4 p.m. East Asian studies lecture. "The Waning of the Kuomintang State in Taiwan," Thomas Gold, prof. of sociology, U. of California, Berkeley. Room 162 McDonnell Hall. 935-4448.

4:30 p.m. Math colloquium. Roever Colloquium. "Isospectral Deformation Rigidity for Compact Negatively Curved Manifolds," Christopher Croke, prof. of mathematics, U. of Pennsylvania. Room 199 Cupples I Hall. 935-6726.

5:30 p.m. Art history lecture. "The Tyranny of Woman in Late 19th-century France," Patricia Mathews, prof. of art history, Oberlin College. Room 200 Steinberg Hall. 935-5270.

7 p.m. Art lecture. Speaker is Douglas Fraser, an illustrator from Canada. Steinberg Hall Aud. 935-8402.



This untitled sculpture by Janet Sanders, assistant professor of art, will be on display in the Gallery of Art in a joint exhibition of works by 49 faculty members from the schools of Art and Architecture. The exhibition opens Friday, Nov. 15, and closes Dec. 19. (See story on page 6.)

Friday, Nov. 15

9:15 a.m. Pediatric Grand Rounds. "Fat," Mark E. Lowe, asst. prof. of pediatrics and of molecular biology and pharmacology. Clopton Aud., 4950 Children's Place. 454-6006.

Noon. Cell biology and physiology seminar. "A Novel Family of Intracellular Chloride Channel Proteins," John C. Edwards, asst. prof. of cell biology and physiology and of medicine. Cell Biology Library, Room 426 McDonnell Medical Sciences Bldg. 362-6945.

4 p.m. Cancer seminar. 24th annual Carl V. Moore Memorial Lecture. "Cancer Genetics: Dissecting a Tumor Suppressor Gene Pathway," Richard D. Klausner, director, National Cancer Institute, National Institutes of Health, Bethesda, Md. Moore Aud., 660 S. Euclid Ave.

7:30 p.m. Earth and planetary sciences lecture. "The St. Louis Science Center: Into the Next Millennium," Douglas King, president, St. Louis Science Center. Room 162 McDonnell Hall. 935-4614.

7:30 p.m. Environmental research lecture. "African Elephants: Too Many or Too Few?" Alan R. Templeton, prof. of biology. Room 215 Rebstock Hall. 935-8430.

Monday, Nov. 18

1 p.m. Math talk. "The Fundamental Group of Compact Manifolds of Negative Curvature," Holly Bernstein, graduate student in mathematics. Room 199 Cupples I Hall. 935-6726.

3 p.m. Physics seminar. "New Materials Synthesis at High Pressure and High Temperature," Paul F. McMillan, prof. of chemistry and biochemistry, Arizona State U., Tempe. Room 241 Compton Hall. 935-6239.

4 p.m. Biology seminar. "Manganese Transport and Photosynthetic Oxygen Evolution," Himadri Pakrasi, assoc. prof. of biology. Room 322 Rebstock Hall. 935-6860.

4 p.m. Immunology seminar. "Signals That Drive T-cell Development in the Thymus," Alfred Singer, chief, experimental immunology, National Cancer Institute, National Institutes of Health, Bethesda, Md. Eric P. Newman Education Center Aud. 362-2798.

8 p.m. Architecture lecture. "Recent Work," Paolo Rizzatto, the Ruth and Norman Moore Visiting Chair. Steinberg Hall Aud. (See story on page 6.) 935-6200.

Tuesday, Nov. 19

Noon. Molecular microbiology/microbial pathogenesis seminar. "A Novel Member of the Tumor Necrosis Factor Receptor Family is a Cellular Receptor for Cytopathic Avian Retroviruses," John Young, asst. prof. of microbiology, Harvard U. Medical School. Cori Aud., 4565 McKinley Ave. 362-2746.

4 p.m. Diabetes research seminar. "Stop Signals for T-Lymphocyte Migration," Michael Dustin, asst. prof. of pathology. Pathology Library, Room 3723 West Bldg. 362-7435.

Wednesday, Nov. 20

6:30 a.m. Anesthesiology Grand Rounds. Title to be announced. Bruce Lindsay, assoc. prof. of medicine. Wohl Hospital Bldg. Aud., St. Louis Children's Hospital. 362-6978.

8 a.m. Obstetrics and Gynecology Grand Rounds. "Uterine Papillary-serous Carcinoma," Jack Basil, chief resident in obstetrics and gynecology. Clopton Aud., 4950 Children's Place. 454-7886.

11 a.m. Assembly Series. "Elevenses With John Updike," John Updike, author of the "Rabbit" quartet. Graham Chapel. (See story on page 1.) 935-5285.

1 p.m. Math talk. "Survival Analysis and Martingales," Dorota Jarosz, graduate student in mathematics. Room 199 Cupples I Hall. 935-6726.

1 p.m. Solid-state engineering and applied physics seminar. "The Rotation of Linearly Polarized Light in a Magnetic Field," D.C. Macke, graduate student in electrical engineering. Room 305 Bryan Hall. 935-5565.

3 p.m. Math seminar. Topic to be announced. Jonathan Shapiro, prof. of mathematics, Northwestern U. Room 216 Cupples I Hall. 935-6726.

4 p.m. Biochemistry and molecular biophysics seminar. "Structure/Function of the 4th and 5th EGF-like Domain of Thrombomodulin," Elizabeth A. Komives, assoc. prof. of chemistry and biochemistry, U. of California, La Jolla. Cori Aud., 4565 McKinley Ave. 362-0261.

4 p.m. Cancer Center seminar. "Tumor Antigens Recognized by Cytolytic T Lymphocytes," Thierry Boon, Ludwig Institute for Cancer Research, Brussels, Belgium. Third Floor Aud., St. Louis Children's Hospital. 362-9035.

5:30 p.m. Psychology lecture/reception. Arts and Sciences Century Club Series.

"Memory Illusions," Henry L. Roediger III, chair, Dept. of Psychology. Goldfarb Aud., McDonnell Hall. Make reservations by Nov. 15. 935-4986.

7:30 p.m. Art lecture. Speaker is Marilyn Minter, teacher, School of Visual Arts, New York City, and visiting artist, School of Art. Steinberg Hall Aud. 935-6500.

Thursday, Nov. 21

11:15 a.m. Mental health seminar. "Mental Health and Aging: Minority and Rural Issues," Arnold Parks, director, sponsored and research grants, Lincoln (Penn.) U. Room 353 West Campus Administrative Center. 935-5687.

4 p.m. Earth and planetary sciences colloquium. "Isotope Hydrology of the Southern Nevada Groundwater and Implications for Paleoclimate Interpretations," Lee Davisson, isotope hydrologist, Isotope Sciences Division, Lawrence Livermore National Laboratory, Calif. Room 362 McDonnell Hall. 935-5610.

4 p.m. East Asian studies colloquium. "Political Scandals and Democratization in Korea," Young Hwan Kihl, prof. of political science, Iowa State U., Ames. Sponsored by the Joint Center for East Asian Studies. Room 331 Social Sciences and Business Bldg., U. of Missouri-St. Louis, 8001 Natural Bridge Road. 516-5753.

4 p.m. Jewish and Near Eastern studies lecture. "Song of My Beloved: Asceticism and Eroticism in Medieval Sephardic Culture," Elliot R. Wolfson, the Abraham I. Katsh Professor of Hebrew and Judaic Studies, New York U. Lambert Lounge, Room 303 Mallinckrodt Center. 935-4162.

4:15 p.m. Philosophy lecture. "Reconfiguring Philosophical Studies of Science: The Archaeology of Gender," Alison Wylie, prof. of philosophy, U. of Western Ontario. Stix International House. 935-6614.

4:30 p.m. Math colloquium. Topic to be announced. Dave Witte, prof. of mathematics, Oklahoma State U. Room 199 Cupples I Hall. 935-6726.

Friday, Nov. 22

9:15 a.m. Pediatric Grand Rounds. "Physiologic Stability and Physiologic State," Timothy G. Buchman, prof. of surgery and of anesthesiology and chief, Burns, Trauma and Surgical Critical Care. Clopton Aud., 4950 Children's Place. 454-6006.

Noon. Cell biology and physiology seminar. "A Cellular Program for Coping With

Everyday Stress," Stephen R. Gullans, Dept. of Medicine, Harvard U. Medical School. Cell Biology Library, Room 426 McDonnell Medical Sciences Bldg. 362-6945.



Music

Sunday, Nov. 17

3 p.m. Wind Ensemble concert. Program: "Smetana Fanfare" by Karel Husa, "Postcards" by Frank Ticheli, "Intermezzo" by Monte Tubb and "Symphony for Band" by Vincent Persichetti. Directed by Dan Presgrave, instrumental music coordinator and lecturer in music. Saint Louis Symphony Community Music School, Trinity Avenue at Delmar Boulevard. 935-5581.

Tuesday, Nov. 19

8 p.m. Student recital. Graham Chapel. 935-5581.

Thursday, Nov. 21

8 p.m. Voice recital. "Lieder of Karl Friedrich Zelter." Performed by mezzo soprano Stephanie Campbell, doctoral candidate in musicology, with Christina Fuhrmann, piano, doctoral candidate in musicology. Graham Chapel. 935-5581.



Performances

Friday, Nov. 15

8 p.m. Performing Arts Dept. presents "The Dybbuk." (Also Nov. 16, 22 and 23, same time, and Nov. 17 and 24 at 2 p.m.) Edison Theatre. Cost: \$8 for the general public; \$6 for senior citizens and WU faculty, staff and students. 935-6543.



Miscellany

Registration continues for the following Office of Continuing Medical Education events: "Bipolar Mood Disorder in Clinical Practice" (Dec. 7) and "Contemporary Management of Congestive Heart Failure" (Dec. 7). 362-6891.

Thursday, Nov. 14

7-8:30 p.m. Midwest AIDS Training and Education Center special event. "The Wizard of AIDS," a performance by HealthWorks Theatre of Chicago. Part of the center's seminar Nov. 13-15 at the Adam's Mark Hotel, Fourth and Chestnut

PET aids breast cancer diagnoses — from page 1

are functional is critical in order to identify which patients will benefit from the less toxic hormonal therapies, Mortimer said.

Current laboratory tests can identify tumor samples that bear estrogen receptors, but they cannot determine which patients will respond to hormone therapy. These laboratory tests identified estrogen receptors in tumor samples from 21 patients in the study. FES-PET then identified 16 of the 21 as candidates for hormone therapy. Of the 11 patients who ultimately received the therapy, 10 responded favorably, the researchers reported. These women were treated with the estrogen antagonist tamoxifen, which prevents or delays the spread of breast cancer.

FES-PET also identified all 20 women for whom hormone therapy was deemed inappropriate. Hence, no false-negative readings were detected, said Barry A. Siegel, M.D., professor of radiology and of medicine and co-author of the study. All 20 of these patients ultimately were treated with chemotherapy.

streets, downtown St. Louis. A reception will be held at 6:30 p.m., and a question-and-answer session will follow the performance. 362-2418.

8 p.m. Reading benefit for hunger relief. "The Writers Harvest: The National Reading." West Campus Conference Center. Co-sponsored by the International Writers Center. Cost: \$10 for the general public; \$5 for students. Proceeds go to hunger relief in St. Louis. 935-5576.

Friday, Nov. 15

Noon. Hillel Center event. "Sexually Speaking" With Dr. Ruth Westheimer." Graham Chapel. 726-6177.

12:30 p.m. Woman's Club event. Special tours and demonstrations will be held at the Central Institute for the Deaf. Luncheon will be held in the institute's cafeteria. Marguerite Grant and Sylvia Sachs will be honored for 50 years of membership. Speaker is Donald Nielsen, director, Central Institute for the Deaf. Open to Woman's Club members and their guests. Cost: \$10. For more info. and to make reservations, call 991-0663.

Saturday, Nov. 16

9 a.m.-noon. Book arts workshop. "Single Sheet Gift Books." Create handmade books using a single sheet of paper. Bring a favorite poem, song lyric or short story for the text of the book. Room 104 Bixby Hall. Cost: \$35. 935-4643.

9 a.m.-noon. Book arts workshop. "Make a Family Video Album." Bring a videocamera. Room 104 Bixby Hall. Cost: \$40. 935-4643.

Sunday, Nov. 17

6:05 p.m. Hillel Center event. The Sports Project Team will watch the St. Louis Blues vs. the Mighty Ducks at Kiel Center. Contact Jason at 935-2626 to reserve a ticket.

Monday, Nov. 18

10 a.m.-2 p.m. "Major/Minor Fair." Undergraduates can learn about various majors and minors and about the Study Abroad Office and the Career Center. Mallinckrodt Center, lower level, outside of The Gargoyle. Sponsored by Lock and Chain, the Career Center, and Arts and Sciences. 935-1774.

1:30-4 p.m. Scientific symposium. A day of remembrance and celebration of the late Oliver H. Lowry (1910-1996). Perspectives from a former student, postdoc and faculty member. Eric P. Newman Education Center. (See story on page 7.)

Calendar guidelines

Events sponsored by the University — its departments, schools, centers, organizations and 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(s), title of event, name(s) of speaker(s) and affiliation(s), and admission cost. Quality promotional photographs with descriptions are welcome. Send items to Judy Ruhland at Campus Box 1070 (or via fax: (314) 935-4259). Submission forms are available by calling (314) 935-4926.

The deadline for all entries is noon Tuesday one week prior to publication. Late entries will not be printed. The Record is printed every Thursday during the school year, except holidays, and monthly during the summer. If you are uncertain about a deadline or holiday schedule or need more information, please call (314) 935-4926.

The researchers deployed a second PET technology, called FDG-PET (fluorodeoxyglucose-PET), to determine the extent of each woman's disease. The glucose in FDG-PET tags migrating tumor cells, which use the sugar as fuel as they grow and spread.

"The premise behind FDG-PET is that glucose is picked up rapidly by tumor cells," Mortimer said.

In the study, FDG-PET imaging was more sensitive than conventional imaging methods, including computed tomography, in tracking the spread of breast cancer through the lymph nodes. The process also is called "staging." FDG-PET also proved to be highly reliable for differentiating between benign and malignant forms of other cancers.

The one-two combination of FES-PET and FDG-PET may point the way to more precise treatment for breast cancer and more accurate prescriptions of hormonal therapy, Mortimer suggested.

— George Corsiglia

ABA's past president to deliver final fall Assembly Series lecture

The American Bar Association's immediate past president, Roberta Cooper Ramo, J.D., will deliver the annual Tyrell Williams Lecture at 4 p.m. Thursday, Nov. 21, in Graham Chapel. The lecture, titled "American Lawyers: Democracy's Foot Soldiers," is free and open to the public.

This is the last Assembly Series lecture of the fall semester. The series resumes in January.

As past president of the American Bar Association (ABA), the world's largest organization of attorneys, Ramo sought to improve public understanding of the law and to improve the justice system. She appointed a Commission on Domestic Violence to recommend legislative and judicial reforms to protect victims of abuse and diminish the intergenerational cycle of violence. Ramo also was dedicated to assisting the ABA in becoming more responsive to the needs of the profession, particularly lawyers in small firms and solo practice, and to broadening the ABA's service to the public at large.

Aside from being the first female president in the ABA's history, Ramo has

been named one of the "Best Lawyers in America" in corporate law. Other areas of Ramo's expertise include business law and real estate and health law. Ramo also has been active in community service, serving as president of the New Mexico Symphony Orchestra Board and as a member of the Executive Committee of the Albuquerque Community Foundation. She received the Governor's Distinguished Public Service Award in New Mexico in 1993.

Ramo graduated magna cum laude from the University of Colorado in 1964 with a bachelor's degree and earned a law degree from the University of Chicago in 1967.

The Tyrell Williams Lectureship was established in 1948 by his family and friends. Williams was a beloved faculty member in the School of Law from 1913 to 1946.

School of Law students will receive one hour of continuing law education credit for attending the lecture.

For more information about the lecture, call (314) 935-5285.

Spalding Gray added to 'OVATIONS!' schedule

Spalding Gray, the incomparable monologist/poet/philosopher, will appear in Edison Theatre at 8 p.m. Feb. 7 and 8 with a new work about fatherhood-after-50 and gaining one's equilibrium through the joys and terrors of learning to ski.

Gray's newest monologue, "It's a Slippery Slope," will replace Jane Lapotaire's scheduled performance of "Shakespeare As I Knew Her," which has been postponed because of conflicting commitments. Lapotaire recently started a two-year London engagement with the

Royal Shakespeare Company's production of "Henry VIII," said Evy Warshawski, Edison Theatre director.

Gray's performance of "It's a Slippery Slope" comes to Edison's "OVATIONS!" series fresh from an extended run in New York City's Lincoln Center Theater.

Tickets to the performance are \$23 for the general public; \$18 for senior citizens and University faculty and staff; and \$12 for University students. Tickets are available at the Edison box office.

For information, call (314) 935-6543.

Sports

Compiled by Mike Wolf, director, and Kevin Bergquist, asst. director, sports information.

Football team topples powerhouse Central

Sparked by two fourth-quarter touchdown runs by junior quarterback Thor Larsen, the Washington University football team rallied from a 23-13 deficit to defeat perennial NCAA Division III power Central College (Pella, Iowa) 26-23 in the Bears' final home game Saturday, Nov. 9. Larsen's game-winning score, a 23-yard quarterback sneak, came with 1 minute, 16 seconds to play in the game. Junior wide receiver Vernon Butler became the Bears' single-season leader in touchdown receptions, pushing his 1996 total to 11 with a pair of first-half TDs. Senior free safety Matt Schipfer made 14 tackles and forced two fumbles.

Current record: 6-3 [3-1 University Athletic Association (UAA)]

This week: 1:30 p.m. (EST) Saturday, Nov. 16, at Rose-Hulman Institute of Technology (Terre Haute, Ind.)

Men's soccer team misses NCAA bid

Despite a pair of victories in the season's final week, the men's soccer team missed earning a bid to the NCAA tournament for the first time since 1989. The Bears defeated Centre College (Danville, Ky.) 2-0 and the University of the South (Sewanee, Tenn.) 2-1 to finish the year 13-5-1, their eighth-consecutive season with 12 or more victories. Senior Sean Fitzgerald, who tallied an assist and a goal in the final week, finished the year as the Bears' leading scorer with eight goals and six assists. Four players were named to the all-UAA squad: senior Justin Reed (first team), junior Justin Glessner (first team), and sophomores Dan Gansler and Greg Rheinheimer (both second team).

Final record: 13-5-1 (4-2-1 UAA)

Volleyball team opens NCAA tourney play

The volleyball team returns to a familiar city this week to open defense of its record five-consecutive NCAA Division III championships. The top-ranked Bears open NCAA South Regional play at 5 p.m. (EST) Friday, Nov. 15, in Atlanta. Just eight days ago, the Bears captured their eighth-consecutive UAA title in Atlanta. WU plays the Savannah (Ga.) College of Art and Design (28-7) on Nov. 15. Host Emory University (30-6) and Trinity University (San Antonio) (31-5) will meet in the other first-round match. The winners play at 7:30 p.m. Saturday, Nov. 16.

Current record: 33-6 (12-0 UAA)

This week: 5 p.m. (EST) Friday, Nov. 15, vs. Savannah College of Art and Design in Atlanta; 7:30 p.m. Saturday, Nov. 16, South Regional championship match in Atlanta

Asa Flanigan earns trip to national competition

Senior Asa Flanigan earned his first trip to the NCAA Division III cross country championships by placing 30th on Saturday, Nov. 9, at the Midwest Regional championships in Rock Island, Ill. Flanigan, who now will compete Saturday, Nov. 16, in Rock Island, covered the 8K course in 25 minutes, 28 seconds, earning the trip to the NCAA meet that he was denied by just 13 seconds last season. Flanigan's performance helped the men's team finish sixth overall, one spot shy of qualifying for nationals as a team. Sophomore Emily Richard finished with a seventh-place showing at the regional meet. Richard posted a 5K time of 18:16, just 10 seconds shy of qualifying for the national meet. The women's team finished fifth overall, two spots shy of qualifying for the NCAAAs as a team.



Learning more about WU

High school senior Asmara Ghebremichael, left, discusses college life with Terry Johns, center, of the Office of Undergraduate Admission and Robin Terry, a junior in Arts and Sciences, during an event Nov. 2-3 in Howard County, Md., which is in the Baltimore-Washington, D.C., area. During the event, about 40 African-American high school seniors who live in that area were interviewed by 17 members of the University's Black Alumni Council. The interviews will serve as supplements to the admissions portfolios of those students who apply to the University. The event was organized by University Trustee Louis G. Hutt Jr. and his wife, Nellie, both alumni of the University; James E. McLeod, vice chancellor for students and dean of the College of Arts and Sciences; and Karen Eubanks of the admissions office. In addition to Robin Terry, other University students who attended the event were senior Jarvis Q. DeBerry and freshman Lanae Williams.

Exhibit combines works by art, architecture faculty

An architecturally inspired sculpture by Janet Sanders, assistant professor of art, will be on display in a Washington University joint faculty exhibition that opens Friday, Nov. 15, in the Gallery of Art in Steinberg Hall.

The exhibition will include works by 49 faculty members from the schools of Art and Architecture. The exhibition will open with a reception from 5 to 7 p.m. Nov. 15 in the gallery. The exhibition closes Dec. 19.

The works on display cover a range of media — sculptures, paintings, multimedia, architectural renderings, design pieces and furniture.

"The focus of this year's faculty show is to create a more interdepartmental exhibition, reflecting our desire to bring the visual arts at Washington University closer together," said Joseph Ketner, Gallery of Art director.

The exhibit organizers sought greater participation from each of the University disciplines that are concerned with the visual arts and design — art, architecture and art history in Arts and Sciences, noted Joe Deal, dean of the art school.

"Work done by the faculty members in these fields appears in many different

forums and settings in other parts of the U.S. and abroad," Deal said. "We thought it would be interesting to bring as much of it together for this exhibition as possible so others could see the range and depth of the work being done here."

Cynthia Weese, FAIA, dean of the architecture school, added, "We welcome the opportunity for increased participation and look forward to future collaboration."

Sanders' work combines both art and architecture elements. She is known for her large-scale sculptures, which she often creates from objects in daily life. Her primary piece in the exhibition combines elements of architectural construction with mechanical devices and mundane objects of the home.

The work consists of a large wedge-shaped construction on wheels with two armchairs at one end. The viewer climbs onto a small platform at the narrow end of the wedge and turns a crank that rotates the installation in a circle. Looking down, one can see the belts and gears in action. (See photo on page 4.)

"There is a psychology to these objects," Sanders said. "The chairs describe a certain idea of family life.

Yet the way they are placed veils a set of complex dynamics. There is a stretch of space between you and the chairs. You rotate a crank and move with the chairs, but you can't reach these objects and the ideals they represent."

Sanders received a bachelor's of arts degree in visual arts from Michigan's Kalamazoo College and a master's of fine arts degree in sculpture from Indiana University. She joined the Washington University faculty in 1994.

The gallery hours are 10 a.m. to 4:30 p.m. weekdays and 1 to 5 p.m. weekends. For more information, call (314) 935-4523.

Lighting designer Paolo Rizzatto to deliver lecture

The exquisitely designed and carefully engineered lamps of Italian architect Paolo Rizzatto not only meet people's lighting needs but illuminate their lives.

A three-time winner of Italy's Association for Industrial Design's Golden Compass award, Rizzatto will discuss the recent work of his company, Luceplan, at 8 p.m. Monday, Nov. 18, in Steinberg Hall Auditorium.

The American Institute of Architects-sponsored lecture is part of the School of Architecture's Monday Night Lecture Series. A recipient of the European Community Design Prize, Rizzatto taught a studio in the architecture school in 1992.

"His lamps are rigorous, extremely well-detailed, crafted and thoughtful," said Stephen Leet, an associate professor of architecture who met Rizzatto in Milan, Italy, in the mid-1980s. "Rizzatto and his associates spend two to four years developing a lamp design — from the plans to the prototype to selecting the material. They are very quality-conscious."

The architecture school's Ruth and Norman Moore Visiting Chair, Rizzatto will display three of his designs in the Gallery of Art's joint exhibition featuring the works of 49 faculty members from the schools of Art and Architecture. (See story on this page.) Technical drawings, sketches and photos of Rizzatto's architectural and industrial designs also will be on display in Givens Hall now through Dec. 6.

In the joint faculty exhibition, Rizzatto, known for his technological innovations, high contemporary style and lighting systems, will display the following:

- Lola floor lamp, which is made of lightweight, durable, black carbon fiber tubing and uses a quartz halogen light source. The sleek, three-legged lamp includes an adjustable knee joint for uneven floors and can be extended for various height requirements.

- Lucilla suspended lamp, which is made of brightly colored shades of Nomex (the material used for race car drivers' suits) draped over a frame in a flowing, rectangular shape. The lamp is suspended by its wiring.

- Young Lady chair, with its cast aluminum base and curved wooden seat design, woven with caning. The chair is manufactured by Alias and is part of a modern system of tables, desks and chairs.

For more information about the lecture or exhibits, call (314) 935-6200.

Campus Watch

The following incidents were reported to the University Police Department from Nov. 4-10. Readers with information that could assist the investigation of these incidents are urged to call (314) 935-5555. This release is provided as a public service to promote safety-awareness on campus.

Nov. 6

1:46 p.m. — A staff member reported that \$50.75 in currency was stolen from an unlocked desk drawer in Umrath Hall between Oct. 31 and Nov. 5.

Nov. 7

1:37 p.m. — A staff member reported that two computer work stations, valued at a total of \$2,000, were stolen from Cupples II Hall.

8:03 p.m. — A student reported that \$18 in currency and a credit card were stolen from an unattended book bag in an Athletic Complex locker room.

Nov. 8

1:28 a.m. — A student walking across a parking lot near the Millbrook Square apartments saw an individual throw a brick at a parked vehicle, breaking a window. The vehicle was damaged multiple other times with the brick.

4:39 a.m. — An officer on patrol discovered that the entrance door to the Career Center in Umrath Hall had been shattered.

8:23 a.m. — University Police received a report of a shattered window at a fraternity house.

4 p.m. — A student reported that someone struck and damaged the right rear

door of a vehicle parked near the Millbrook Square apartments.

6:24 p.m. — A student reported that the left rear window of a vehicle parked near the Millbrook Square apartments was broken.

Nov. 9

11:22 a.m. — A student reported that a mountain bike, valued at \$320, was stolen from a bike rack near Liggett Residence Hall.

2:59 p.m. — A student reported that a locked mountain bike, valued at \$370, was stolen from a bike rack near a fraternity house.

6:06 p.m. — University Police responded to a minor, non-injury traffic accident at Big Bend and Wydown boulevards.

7:03 p.m. — A student reported that food items were stolen from a suite in the Millbrook Square apartments.

Nov. 10

2:37 a.m. — A student reported that a windshield of a vehicle parked near Myers Residence Hall was shattered.

University Police also responded to two reports of vandalism to vehicles — one in the South 40 and the other in a parking lot near the tennis courts.

Psychological center offers group therapy

Insomniacs and women with eating disorders can get advice and support in weekly group-therapy sessions at Washington University's Psychological Service Center at West Campus, 7 N. Jackson Ave., Clayton.

The Psychological Service Center, a service of the Department of Psychology in Arts and Sciences, provides low-cost counseling to the general public on a sliding-fee scale. Group-therapy sessions are led by advanced doctoral candidates in clinical psychology with close supervision from practicing, licensed psychologists. Support groups meet for four to seven weeks, and fees average \$10 per session.

The center is seeking participants for these support groups:

- Insomnia: Behavioral group therapy offers a safe, effective, non-drug treatment

option for people with sleeping difficulties. This group will meet from 6 to 7:30 p.m. Tuesdays for four weeks beginning this month. Prior to the initial meeting, a brief consultation will be held to determine if the group is appropriate for each individual. The fee for the sessions is \$40. The group will be led by Christina Smith, a doctoral candidate in psychology.

- Women consumed by food: This group is for women 22 and older who binge eat, are obsessed with eating or compulsively overeat. The fee is \$10 per session and is payable in two installments of \$40 and \$30 at the first and fifth sessions. The group will meet from 5:30 to 7 p.m. on seven Tuesdays. The group leader is Gretchen Brenes, a doctoral candidate in psychology.

For more information, call (314) 935-6555.

For The Record

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

Of note

F. Sessions Cole, M.D., professor of pediatrics and of cell biology and physiology, received an \$833,368 three-year grant from the National Heart, Lung and Blood Institute for a project titled "Pulmonary Surfactant Protein B Deficiency in Infancy." ...

Seth A. Eisen, M.D., associate professor of medicine, received a \$170,544 one-year grant subcontract from Harvard University for a project titled "Twin Study of Consequences of Drug Abuse." ...

Carol A. Frost, Ph.D., associate professor of accounting, won the competitive manuscript education award of the Association of Chartered Accountants in the United States for her paper titled "Characteristics and Information Value of Corporate Disclosures in Forward-looking Information in Global Equity Markets." The award includes a prize of \$2,500. In December, Frost will present the paper in Paris at the Paris Bourse conference on equity markets. ...

Dante Lauretta, a fourth-year graduate student in the Department of Earth and Planetary Sciences in Arts and Sciences, was awarded this year's Nininger Meteorite Award of \$1,000 for his experimental research on the chemistry of iron sulfides in chondritic meteorites. His work is important for understanding the chemical reactions between gas and grains in the solar nebula, from which the solar system is formed. Lauretta also is a McDonnell Center for the Space Sciences in Arts and Sciences fellow and has received travel

grants to attend the Prague, Czech Republic, and Berlin meetings of the Meteoritical Society. ...

Robert J. Myerson, M.D., Ph.D., associate professor of radiology, received a \$546,310 three-year grant from the National Cancer Institute for a project titled "Simultaneous Thermoradiotherapy Dose Escalation Trial." ...

John W. Newcomer, M.D., assistant professor of psychiatry, received a \$557,169 three-year grant from the National Institute of Mental Health for a project titled "Neuroendocrinology of Memory and Aging in Schizophrenia." ...

Ben Woods, assistant librarian in the Chemistry Library, has been acknowledged for his scholarly contributions in dissertations and other research works for more than 20 years. Most recently, Woods was cited by **Zerom Tesfai, Ph.D.**, a May graduate in chemistry in Arts and Sciences, for Tesfai's project titled "The Use of Furans in Intramolecular Anodic Coupling Reactions," and by **Lisa Anne Jenkins Autry, Ph.D.**, an August graduate in chemistry, for her project titled "Mechanistic Studies of the Transesterification and Hydrolysis of RNA by Terpyridyl Copper (II) Complexes."

Speaking of

Wendy Auslander, Ph.D., and **Nancy Morrow-Howell, Ph.D.**, both associate professors of social work, gave presentations in September at the Symposium on Psychosocial Treatments and Services: Social Work's Contribution to the Trans-NIH Research Agenda. Auslander presented "The Long-term Impact of AIDS Prevention for Youth in Residential Cen-

ters," while Morrow-Howell presented "Evaluation of an Intervention for Elders at Risk of Suicide." ...

Elizabeth Childs, Ph.D., assistant professor of art history and archaeology in Arts and Sciences, gave an invited lecture Oct. 14 at the High Museum of Art in Atlanta. The title of the lecture, held in conjunction with a Matisse exhibition there, was "Sensation and Expression: Representation in the Art of Gauguin, van Gogh and Matisse." Childs also presented a paper titled "Art as Science, Science as Art: John Wesley Powell and the Representation of the Grand Canyon in the 1870s" on Oct. 29 at the Geological Society of America meeting in Denver. ...

David Felix, Ph.D., emeritus professor of economics in Arts and Sciences, was a plenary speaker at the XII Conference of the Association of Faculties, Schools and Institutes of Economics of Latin America held Oct. 14-16 in Mexico City. A Spanish version of his paper titled "On Drawing General Policy Lessons From Recent Latin American Currency Crises" will be published in *El Trimestre Economico*, Mexico's leading economic journal.

On assignment

Dorsey D. Ellis Jr., J.D., dean of the School of Law, served on a panel on punitive damages at the National Conference of State Legislators held in St. Louis. The panel was sponsored by the Law and Justice Committee and discussed the recent U.S. Supreme Court ruling overturning a \$2 million punitive-damage award to the purchaser of a new BMW automobile with a touched-up paint job. **Kathleen Clark, J.D.**, associate professor of law, gave a presentation on "Campaign Finance Reform and Protecting the Public Trust" at the conference. ...

John Hoal, visiting assistant professor of architecture and director of the master of architecture and urban design program, is currently working with Brucemoor Inc. (which is overseeing a National Trust for

Historic Preservation house and grounds) on developing a communitywide program for increasing the appreciation of architecture and urban design in Cedar Rapids, Iowa.

To press

J. Curtis McMillen, Ph.D., assistant professor of social work, recently contributed the article "Attributions of Responsibility for Child Sexual Abuse and Adult Adjustment" to the *Journal of Interpersonal Violence*. ...

A poem by **Carl Phillips**, associate professor of English and of African and Afro-American studies in Arts and Sciences and director of the Creative Writing Program, titled "As From a Quiver of Arrows," appears in "The Best American Poetry 1996," published by Scribners. This is Phillips' third-consecutive appearance in the anthology. In addition, a prose-memoir piece is included in "Boys Like Us: Gay Writers Tell Their Coming Out Stories," recently released by Avon Books. ...

David E. Pollio, Ph.D., assistant professor of social work, recently had the article "Walking Around With a Question Mark on Your Head: Social and Personal Constructs Among Persons on the Streets" published in the *Journal of Applied Social Science*.

Correction

Paul S.G. Stein, Ph.D., professor of biology in Arts and Sciences, should have been listed as the mentor for **Ari Berkowitz, Ph.D.**, in an item in the Nov. 7 Record.

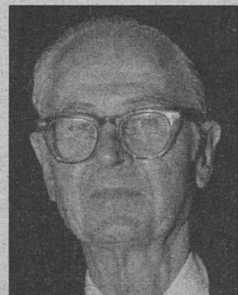
Guidelines for submitting copy:

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

Daylong event to honor late Oliver Lowry

A daylong event to celebrate the life of Oliver H. Lowry, M.D., Ph.D., will be held Monday, Nov. 18.

Lowry died June 29, 1996. He was dean of the School of Medicine from 1955-58, was chair of the Department of



Oliver H. Lowry

Pharmacology from 1947 to 1976, and was Distinguished Professor Emeritus of molecular biology and pharmacology from 1979 to 1996. The event will begin at 10 a.m. in Graham Chapel on the Hilltop Campus with remarks by colleagues and friends. From 1:30 to 4 p.m., there will be a scientific symposium in the medical school's Eric P. Newman Education Center. Speakers include three of Lowry's former students/

faculty: Daniel Nathans, M.D., Johns Hopkins University (gene regulation by growth factors); Philip Needleman, Ph.D., Monsanto Co. and G.D. Searle & Co. (novel anti-arthritis agents); and Jack Strominger, M.D., Harvard University (human NK cells).

Lowry was a biochemist whose name became a household word in laboratories throughout the world after he described a simple-yet-sensitive method for measuring the amount of protein in solutions. He also pioneered freeze-drying methods to preserve cells in the natural state, invented a microbalance that could measure less than a billionth of a gram and developed ever-more-sensitive assays that found widespread applications in biology and medicine.

He was elected to the American Academy of Arts and Sciences in 1957, the National Academy of Sciences in 1964 and the Royal Danish Academy of Sciences in 1968.

Philip Dybvig receives Common Fund Prize

Philip H. Dybvig, Ph.D., the Boatmen's Bancshares Professor of Banking and Finance, has won the first Common Fund Prize for his research relevant to the management of educational endowments.

The award, amounting to \$50,000, rewards Dybvig's proposal to extend and communicate to practitioners his research on the necessity of establishing a link between an educational institution's budgeting and investment functions.

"My previous studies have explored the relationship between asset allocation and spending policy," Dybvig said, "and they've shown that the key is to cover relatively fixed expenses through a mix of less risky assets, particularly in bad times. Conversely, educational institutions should be able to invest in a more aggressive asset mix and increase the expenditure level during periods of

strong investment results or when additions are made to the endowment."

Common Fund President and Chief Executive Officer Robert L. Bovinette said: "The board and staff see the model that Professor Dybvig has developed as an important contribution to the critical relationship of investing and budgeting. We are pleased to help nurture this seminal research with strong potential to influence practice."

Lee Weeks, vice chancellor for financial operations, said the University does tie together its asset allocation and spending policy. "This research should be very helpful to those making investment policy decisions, whether for a university, a church or the Ford Foundation," he said, "because it helps assure that its need for financial support and its investment policy work in tandem toward its mission."

The Common Fund, a nonprofit membership consortium, manages \$17.5 billion — the world's largest pool of endowment and cash assets exclusively for universities, colleges and independent schools — for approximately 1,400 member schools. It created the Common Fund Prize to celebrate its 25th anniversary.

Florida M. Bosley named director of Student Educational Service

Florida M. Bosley, Ph.D., has been appointed director of the Student Educational Service (SES), according to Justin X. Carroll, dean of student affairs. The appointment was effective Sept. 18.

Bosley has been on the staff of the SES since 1976. She was named assistant director in 1981 and associate director in 1985. Bosley has served as acting director since 1995.

The SES, which is located in Room 219 Umrath Hall, provides a host of



Florida M. Bosley

resources and services to students. Specific services include counseling, tutorial referral, vocational testing, academic advising, and group workshops on reading skills, test-taking and note-taking.

The SES also plays an important part in providing cultural programs for minority students. "We're pleased to have Florida heading up this important student service," Carroll said. "She brings experience and a real understanding of students who are faced with special challenges."

Bosley, a Missouri-licensed psychologist, received a doctorate in counseling psychology in Arts and Sciences from Washington University in 1982. In addition, she earned a bachelor's degree in nursing education from Saint Louis University, a master's degree in nursing education from Washington University and a specialist degree in education from Southern Illinois University.

Previously, Bosley served as director of social service for the Job Corps Center

for Women, a St. Louis-based program that provides an array of social services to low-income youth.

Bosley also has served as an adjunct assistant professor at Saint Louis University and at Harris-Stowe Teacher's College and as an instructor at WU.

Her commitment to youth counseling has included an array of high school, elementary school and health center posts.

Bosley also is a past president of the Missouri Association for Multicultural Counseling and Development and a past executive board member of the Missouri Counseling Association. She recently completed a term on the executive council of the Association for Multicultural Counseling and Development.

Obituaries

Axel Arneson, former gynecology professor

Axel Norman Arneson, M.D., an emeritus clinical professor of obstetrics and gynecology and emeritus clinical associate professor of radiology, died Friday, Nov. 1, 1996, at his home in St. Louis. He was 91.

Arneson earned a medical degree from Washington University in 1928 and retired in 1985 from the staffs of Barnes and Jewish hospitals, Washington University clinics and St. Luke's Hospital.

Memorial contributions may be made to Washington University School of Medicine, A. N. Arneson Memorial Fund, Department of Obstetrics and Gynecology, Campus Box 8064, 660 S. Euclid Ave., St. Louis, MO, 63110.

Opportunities & personnel news

Hilltop Campus

The following is a partial list of positions available on the Hilltop Campus. Information regarding these and other positions may be obtained in the Office of Human Resources, Room 130 West Campus, or by calling (314) 935-5906.

Administrative Assistant 970073. *Board of Trustees/ Women's Society.* Requirements: high school graduate with some college preferred; excellent organizational and verbal skills; efficiency in word processing and data processing; highly computer-skilled; ability to be creative in using computer to increase office efficiency; ability to coordinate numerous details to prepare for an event; willingness to work outside of office hours setting up meetings/events; skilled in writing and proofing minutes and reports; appreciates need for accuracy, even in routine things; willingness to be of assistance in a variety of tasks; pleasantness with fellow workers and external constituencies; five years secretarial experience. Application required.

Personal Computer Lab Supervisor 970094. *School of Business.* Requirements: high school graduate with some college preferred; good communication and organizational skills; service-oriented; experience with Windows '95; Novell networking experience preferred. Application required.

Departmental Secretary 970096. *Alumni and Development.* Requirements: associate's degree or equivalent knowledge; specialized secretarial and business training helpful; three years general office experience; excellent typist; good command of English; alertness; well-spoken; ability to deal with multiple priorities with minimal supervision; maturity; well-groomed; pleasantness; ability to work well with and relate easily to others. Application required.

Reference Assistant 970098. *Olin Library.* Requirements: four years of college, degree preferred; library public-service experience and/or courses in librarianship desirable; ability to respond to the public in a helpful and courteous manner; ability to work independently with minimal

supervision; ability to organize work and to handle detailed work with accuracy; experience using microcomputers, especially word processing; ability to type quickly and accurately; experience using the Internet, especially the World Wide Web, desirable; ability to work under pressure and to adjust to a fluctuating academic year schedule, which may include evening and weekend hours; science or engineering background desirable. Application required.

Accounting Clerk 970108. *Earth and Planetary Sciences.* Requirements: high school graduate with some college; ability to work accurately and efficiently with numerical data and with guidelines, particularly those needed to comply with A-21 and A-110 circulation; ability to learn University electronic accounting systems for data entry and information retrieval; ability to learn and retain detailed department bookkeeping procedures; ability to interact well with faculty, staff, students, other University employees, and vendors. Application required.

Receptionist 970112. *Student Activities.* Requirements: high school graduate; word processing, spreadsheet and database PC experience using Microsoft Word, MSEX and Filemaker Pro; ability to interact and maintain positive relationships; pleasant disposition in dealing with students, staff and the general public; flexibility; detail-oriented; team player; ability to set priorities and work on numerous tasks with constant interruptions; high degree of service orientation; sense of humor. Schedule: part-time. Application required.

Assistant Manager of Personal Computing Support 970114. *School of Business.* Requirements: high school graduate with some college; experience installing, maintaining and providing support for LANs (Novell, NT Server, Appletalk, TCP/IP); experience with PC and Macintosh hardware maintenance issues; strong problem-solving skills; demonstrated outstanding customer-service skills. Application required.

Accounting Clerk 970115. *Development Services.* Requirements: high school graduate; good judgment; ability to work under pressure; ability to work well with others; adaptable to change. Application required.

Clinical Program Assistant 970117. *School of Law.* Requirements: high school graduate with some college preferred; experience with word processing software and databases; experience with the Windows environment preferred; good filing, organizational and communication skills; good spelling, grammar and punctuation skills; experience working in an office setting. Application required.

Genetics Research Technician 970118. *Department of Biology.* Requirements: bachelor's degree; experience using calculators and computers. Application required.

Administrative Assistant 970119. *Alumni and Development Programs.* Requirements: high school graduate with some college preferred; highly motivated with expertise in administrative skills; PC and office systems management experience; excellent oral and written communication skills; three years general office experience, including hands-on experience with word processing; ability to work effectively and pleasantly with a diverse staff, a broad range of alumni volunteers, and vendors; excellent time-management skills; ability to handle multiple projects simultaneously in an environment in which priorities change frequently; well-organized; sound judgment in establishing priorities; willingness to occasionally work overtime, evenings and weekends. Application required.

Operation Clerk I 970122. *Computing and Communications.* Requirements: high school graduate; good physical health; ability to safely handle a loaded two-wheel dolly up and down stairs; willingness to work required extra hours, weekends and shift changes. Schedule: part-time, Tuesday-Saturday. Application required.

External Reporting Accountant 970123. *Accounting Services.* Requirements: bachelor's degree with a major or concentration in accounting; certified public accountant; three or more years experience in a public accounting firm or equivalent experience in a university general accounting or financial reporting position; working knowledge of Lotus or similar spreadsheet applications; excellent written and oral communication skills; ability to function independently; willingness to commit

to a level of effort required to complete the primary duties under somewhat stressful and time-constrained circumstances; specific knowledge of Financial Accounting Standards Board Opinions 116, 117 and 124; familiarity with tax regulations governing preparation of Form 990 and the reporting requirements of split-interest life income trusts. Application required.

Medical Campus

The following is a partial list of positions available at the School of Medicine. Employees interested in submitting a transfer request should contact the Human Resources Department of the medical school at (314) 362-7202 to request an application. External candidates may call (314) 362-7195 for information regarding application procedures or may submit a résumé to the human resources office located at 4480 Clayton Ave., Campus Box 8002, St. Louis, MO, 63110. Please note that the medical school does not disclose salary information for vacancies, and the office strongly discourages inquiries to departments other than human resources. Job openings also may be reached via the World Wide Web at <http://medicine.wustl.edu/wumshr>.

Medical Assistants 950843-R. The School of Medicine needs qualified medical assistants looking for part-time work. Front- and back-office duties are involved. Requirements: self-starter; proven patient-care skills.

Medical Research Technician 960187-R. *Pharmacology.* Requirements: energetic; organizational skills; experience with basic instrumentation and scientific math calculations; experience working with mice and surgery highly preferred. Responsibilities include breeding and maintaining lab mice; making transgenic and knockout mice; organizing and maintaining records of mouse strains; working with radioisotopes to make DNA probes; and performing other basic laboratory duties as assigned.

Medical Research Technician 970066-R. *Obstetrics and Gynecology.* Requirements: knowl-

edge of basic instrumentation and instrument troubleshooting; energetic. Responsibilities include working with: solution/media preparation, scientific math calculations, protein and rna hybridization, radioisotopes, recombinant DNA, sterile techs, tissue cultures, frozen sections, paraffin, sectioning, and tissue staining. This position provides molecular and cellular biology support. Schedule: part-time, 20 hours per week.

Programmer Analyst II 970087-R. *Bone Marrow Transplant.* Requirements: bachelor's degree; superior interpersonal skills; experience with systems programming, database selection and establishment, and specialized program design; experience with networking/data communications, scientific and statistical programming, and MS/DOS preferred. Responsibilities include creating a new database for the Bone Marrow Transplant Division; recommending and creating a structure in which to organize data for clinical trials; providing statistical analysis; and maintaining the database.

Medical Research Technician 970164-R. *Psychiatry.* Requirements: bachelor's degree in biology or chemistry preferred; organizational skills; troubleshooting ability; fine motor skills. Responsibilities include performing animal research aimed at defining behavioral and biochemical changes relevant to psychiatric changes. This position requires extensive training.

Medical Research Technologist 970222-R. *Anatomy.* Requirements: bachelor's degree with course work and/or experience in anatomy and physiology, master's degree preferred; ability to work with computers. Responsibilities include preparing tissue for immunohistochemical and in situ hybridization techniques.

Programmer Analyst 970277-R. *Psychiatry.* Responsibilities include assisting with various computer-related tasks on a research project; installing hardware and software; troubleshooting; and some SAS programming. Schedule: part-time, 20 hours per week.

Network Support Technician 970281-R. *Psychiatry.* Requirements: related college degree

and one year experience with Novell, Compaq, Apple, Notes, GroupWise, Microsoft Office and the Internet; self-motivated; team player; excellent technical, troubleshooting, organizational and communication skills; ability to work independently on network projects and on desktop maintenance and troubleshooting.

Professional Rater 970288-R. *Psychiatry.* Requirements: effective interpersonal and communication skills; ability to take directions and pay attention to detail; psychology, social work or related experience beneficial. Responsibilities include contacting and recruiting research subjects; conducting interviews; and completing all paperwork for each interview. Schedule: flexible, part-time, weekends and evenings, 16 hours per week.

Research Patient Coordinator/Outreach Worker 970314-R. *Applied Physiology.* Requirements: licensed registered nurse; experience in geriatric environment. Responsibilities include serving as a representative of the Washington University Long Term Care Research Consortium to outside constituencies; coordinating research study protocols, which involves screening and evaluating clinical data for potential study participants; guiding enrollment; performing clinical assessments of nursing home residents; monitoring patient compliance; accumulating data; recordkeeping; assisting in presentations to IRM committee; and preparing budgets.

Administrative Coordinator 970386-R. *Transportation.* Requirements: marketing experience; effective communication skills and high degree of diplomacy; accounting and budget reconciliation beneficial. Responsibilities include managing Medical Center's ride-share program; promoting and marketing the program to include commuter alternatives, the ride-home program, transit pass sales, and van/carpool incentives.

Professional Rater 970393-R. *Psychiatry.* Requirements: college degree in psychology, social work or related field. Responsibilities include recruiting study respondents; conducting interviews; editing completed interviews; training new personnel; preparing productivity reports; and serving as a liaison between the data staff and data collectors. This is a full-time position for a nine-month high-intensity research project.

Olin Hatchery gives students a dose of real-world experience — from page 1

Afterward, at the exposition in two student lounges, each entrepreneur displayed his or her idea as students roamed table to table, meeting and talking with the entrepreneurs to become better acquainted with them and their ideas. Journalists, including one working for National Public Radio's "Morning Edition," also sampled the action.

"This was a great way for students to learn about what makes entrepreneurs tick and how much they care about their dreams," Roberts said.

It also was a chance for students to form or solidify their teams, with team members deciding what skills would make the strongest complement and whether they wanted to work on an outside entrepreneur's idea or their own.

Roberts will teach the Hatchery, a three-credit elective in entrepreneurship to be offered in the spring, and will meet regularly with all the teams. Each team working with an outside entrepreneur will meet on an as-needed basis with the entrepreneur, and each team will be assigned a mentor from the business community. To further help students prepare their business plans, the Hatchery will offer a series of workshops taught by practitioners and faculty members.

On their applications, which are due Nov. 22, student team members wanting to

work with an outside entrepreneur will submit résumés and make the case for why their team is the right choice for that entrepreneur. Teams may apply to more than one project, and each entrepreneur gets to pick a team. Each outside entrepreneur for whom a match is found will pay a \$2,000 fee. And, of those, any who receive funding within one year of the students' business-plan presentation in the spring will be expected to make a \$2,500 equity stake available to each student on the team involved, up to a maximum of \$10,000. The equity stake for students is tentative, pending resolution of legal and regulatory issues with the Securities and Exchange Commission.

Olin alumna and Hatchery advisory board member J. J. Stupp, an entrepreneur who is president of TableTalk, a publisher of educational and family games, believes the fees are reasonable. "A business plan can easily cost \$50,000," she said, "so getting a polished plan from the Hatchery is a great bargain."

The Hatchery has benefited from

excellent advice from its 18-member advisory board, which is made up of business school faculty and alumni and corporate leaders. It helped design the Hatchery as an innovative program and

"The Hatchery is exactly the kind of experiential learning we want to offer our students. ..."

— Stuart I. Greenbaum

helped screen entrepreneur applications. Board members are enthusiastically supportive.

"The Hatchery is a very exciting and very challenging prospect for the Olin school, Washington University and the business community," said board member Gregory Taylor, president and chief executive officer of Stifel, Nicolaus & Co. Inc. "All good business development stems from entrepreneurship, an activity not well understood. So any attempts we make to understand it are beneficial."

The Hatchery is a win-win-win situation. For students, as junior finance major Marc Packman said, "This is a good way to get real-world experience." Students also get a chance to network into the business community, boosting their employment prospects; a chance for an equity stake in a growing company, if

the program can go forward on that basis; and crucial feedback from individuals with investment experience.

Entrepreneurs get a polished business plan; learn how one's created; and gain experience with students who could be future employees.

Investors participate in the educational process; get to hear about promising, well-reviewed business ideas; and get a point of contact should they feel there is an investment opportunity worth exploring.

Roberts, an economist, award-winning teacher and author, designed the Hatchery as a signature program for the Olin school and — as with all Management Center programs — with one objective in mind: to create an educational program that ties the classroom to the real world. In addition, the hallmark of the center's programs is having incentives that encourage maximum performance.

As business school Dean Stuart I. Greenbaum, Ph.D., said: "The Hatchery is exactly the kind of experiential learning we want to offer our students, and it offers the kind of strategic partnerships we want with enterprising companies and investors. It spells good news for Olin and the whole business community."

— Nancy Belt