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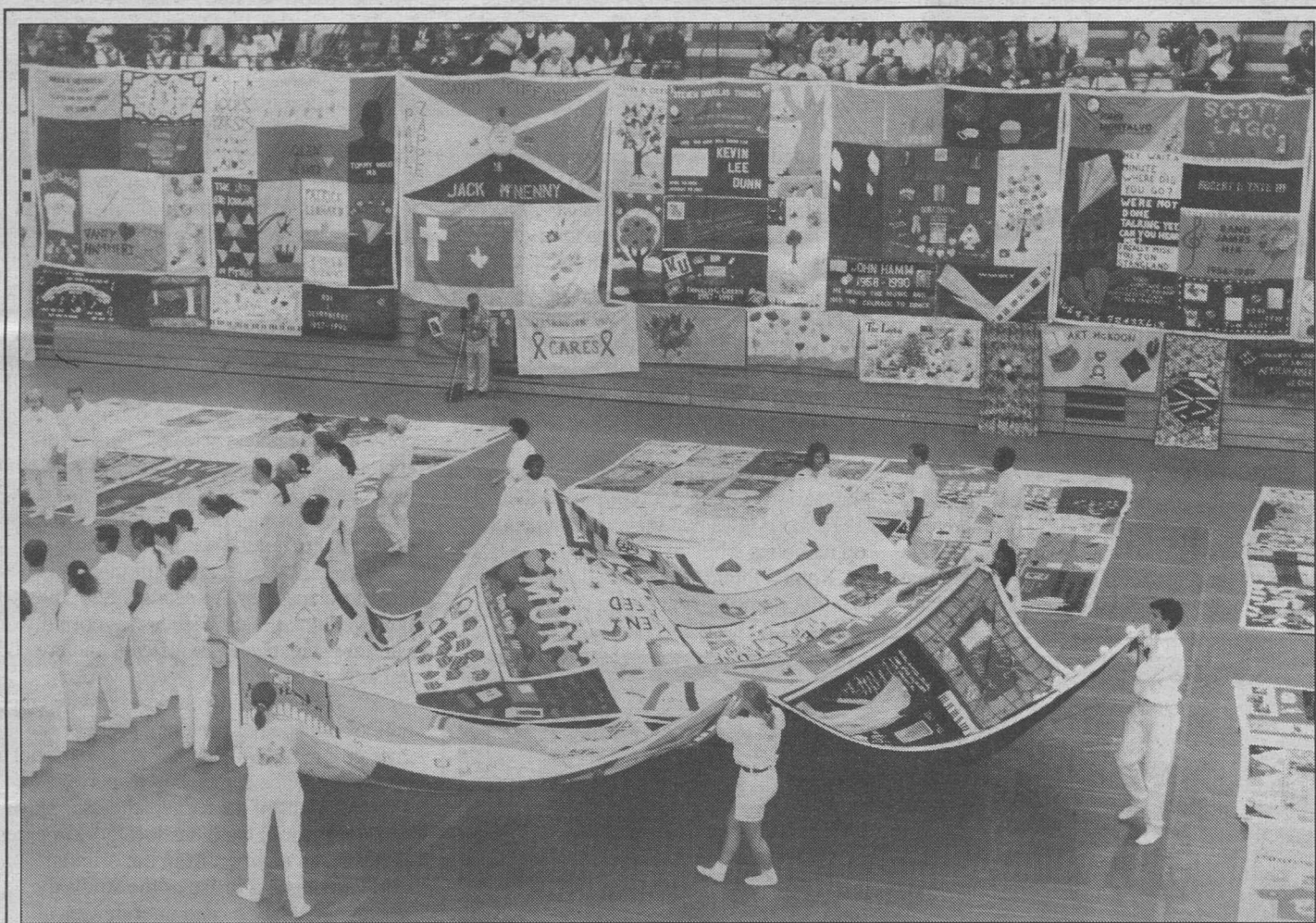
Washington University Record, October 20, 1994

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Members of the Washington University Effort for AIDS helped assemble part of the 11,000-panel Project AIDS Memorial Quilt, which was displayed in the Field House Oct. 14-16. The group teamed with the NAMES project and St. Louis Effort for AIDS to bring this section of the 27,000-panel quilt to St. Louis and reassemble it at Washington University. Each 3-by-6 panel represents a person who has died of AIDS.

Amendment No. 7 could trigger state financial aid cuts

Washington University students from Missouri could lose up to \$1.15 million in state financial aid if Missourians approve Hancock II — also known as constitutional Amendment No. 7 — in the Nov. 8 election. This ballot proposal would significantly cut state discretionary spending.

Opponents predict Hancock II will trigger cuts of between \$1 and \$5 billion in education, law enforcement, transportation and social service programs. Supporters say the amendment would rein in state spending and enable voters to decide all tax increases.

Total cuts to higher education would likely exceed \$200 million, while cuts to K-12 education will top \$300 million. Opponents also warn that passage of Amendment No. 7 would force the closure of three state prisons, the reduction of the state's Highway Patrol by one-third, and the end of state-supervised probation and parole programs. Social services also would be affected, including meals for the elderly, investigations of abuse and neglect, and child day-care services, opponents predict. In addition, if the state is unable to match federal transportation funds, billions in federal highway dollars could go to other states.

"Voters who may be drawn to the component of Amendment No. 7 that puts all tax increases on the ballot must take the time to understand all the implications of its passage, including drastic cuts in public and private education at every level," said Clarence C. Barksdale, vice chair of the Washington University Board of Trustees.

Amendment No. 7 would replace the original Hancock Amendment of 1980. Hancock I set a limit on the amount of revenue the state could collect in a year, including state taxes and fees but excluding federal distributions. The limit ties growth of state spending to that of the economy. Under Hancock I, voter-approved revenue sources were not included under this cap.

Under Amendment No. 7, all revenues, including voter-approved taxes, would be considered state revenue and subject to the same revenue cap. The addition of these voter-approved revenues — including the Proposition C education tax and the Proposition A highway tax — would put the state budget well over the revenue limit imposed by Hancock I. Not only would these and other previously voter-approved tax increases be rescinded, next year's General Assembly would have to find other budget areas to slash to get out of the red. In addition, it is unclear whether the revenue cap includes federal money. If so, the state would have to cut state revenue for each federal dollar it takes in.

Analysts, including James R. Moody, former budget director under Gov. John

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Founders Day 1994

University celebrates 141st anniversary; four faculty honored

CBS news anchor Paula Zahn will speak at Washington University's Founders Day banquet Oct. 29 at the Adams Mark Hotel in downtown St. Louis. The annual banquet commemorates the founding of Washington University in 1853 and is sponsored by the Washington University Alumni Association.

The banquet begins with cocktails at 6:30 p.m. Dinner follows at 7:15 p.m. and the program starts at 8:30 p.m. The reservation deadline is Monday, Oct. 24. For more information, call 935-7378.



Paula Zahn

Zahn has been co-anchor of "CBS This Morning" since 1990. She is the recipient of many professional awards, including two Emmy Awards, one for investigative reporting and another for her coverage of a mid-air airplane collision over California.

Her broadcast career has taken her throughout the United States and the world. Zahn has covered political conventions, the 1992 and 1994 Winter Olympics and the activities of world leaders as diverse as U.S. presidents Bush, Reagan and Clinton, and former Soviet Union leader Mikhail Gorbachev and Cuban Prime Minister Fidel Castro.

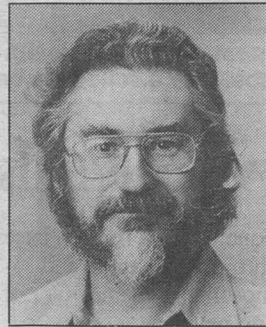
In addition to speaking at the Founders Day banquet in the evening, Zahn will address students between 3:30 and 4:30 p.m. Oct. 29 in Edison Theatre. Although admission is free to all Washington University students, tickets are required. Tickets will be available from 8:30 a.m. to 5 p.m. Thursday, Oct. 20, and Friday, Oct. 21, at the Alumni House, or from Edison Theatre box office Oct. 24 through 27.

Four Distinguished Faculty Awards and seven Distinguished Alumni Awards will be conferred at the banquet. The University's Board of Trustees also will present the Robert S. Brookings Award to two individuals "who exemplify the alliance between Washington University and its community."

(A story on the alumni and Brookings Award recipients will appear in the Oct. 27 Record.)

The four faculty members are being honored "for outstanding commitment to teaching and dedication to the intellectual and personal development of students."

They are: Glenn C. Conroy, Ph.D., professor of anatomy and anthropology; Gary J. Miller, Ph.D., the Reuben C. Taylor Jr. and Anne Carpenter Taylor Professor of Political Economy; Douglass C. North, Ph.D., the Henry R. Luce Professor of Law and Liberty, professor of economics and history; and Michael W. Sherraden, Ph.D., the Benjamin E. Youngdahl Professor of Social Development in the George Warren Brown School of Social Work.



Glenn C. Conroy

CONROY joined the Washington University faculty in 1983 as professor of anatomy and anthropology. In 1991 he led the expedition to Namibia that

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Plant lab dedicated to former student, current trustee

A celebration to dedicate the Gladys Levis Allen Laboratory of Plant Sensory Physiology was held Oct. 6 at the laboratory's location in Room 252 Busch Hall.

The laboratory houses the work of Barbara Pickard, Ph.D., professor of biology. It is named for Gladys Levis Allen of Alton, Ill., an emeritus Board of Trustees member and 1942 graduate of the University, who, with her husband, Glenn L. Allen Jr., strongly supports Washington University education and research.

The celebration brought together Washington University faculty, staff and students

who, over the years, have been involved in plant sensory physiology research, a Pickard research specialty, which Gladys and Glenn Allen generously have funded.

Chancellor William H. Danforth, longtime friend of Gladys Levis Allen; Barbara Schaal, Ph.D., professor and chair of the Department of Biology; and Pickard made remarks during the celebration.

Gladys Levis Allen first was a student at Washington University during the chairmanship of Viktor Hamburger, Ph.D., Edward Mallinckrodt Distinguished University Professor Emeritus of Biology. A great admirer of Hamburger, she and her family

later created the Hamburger Seminar Room in McDonnell Hall. Gladys and her first husband, Robert Levis, had four daughters, three of whom attended Washington University. She long has served on the Board of Trustees, and is a board member of the prestigious Monticello College Foundation, which established the Spencer T. Olin Fellowships for women to pursue graduate studies at Washington University.

It was partly through Robert Levis' work in biotechnology that Gladys Levis grew interested in plant physiology.

In 1985, Gladys Levis Allen indulged her

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Psychology Professor Martha Storandt, Ph.D., gives new insight into the aging process

Black achievement 5

The Black Arts and Sciences Festival featuring guest speakers and panel discussions is scheduled for Oct. 23-29

Medical Update

Study finds high mortality rate among Vietnam veterans

Preliminary results of a study conducted at the School of Medicine reveal a high mortality rate among Vietnam War veterans, especially for those who were drug users while in the service. The study's researchers say these results indicate the enduring impact the Vietnam experience has had on many soldiers.

The study compared the death rates of three groups: male Vietnam veterans whose drug use was confirmed by a drug test when they were coming home; returning veterans whose drug tests did not reveal recent drug use; and civilian controls of similar age and background. Researchers found that the cumulative death rate for these men, now mostly in their mid-40s, is almost four times higher among Vietnam veterans who tested negative for drugs than among men of similar age who did not go to Vietnam. In addition, the death rate among drug-positive veterans is more than nine times higher than that of the civilian controls.

"The differences are striking," said principal investigator Rumi Kato Price, Ph.D., research assistant professor of epidemiology in psychiatry. Price and colleagues presented their findings recently at the

annual meeting of the College on Problems of Drug Dependence. The researchers are not yet sure why the death rates among veterans are higher than their civilian controls, but Price said the contrasts are so strong that substance use and the Vietnam experience almost certainly play a key role in the increased mortality.

The study's researchers say these results indicate the enduring impact the Vietnam experience has had on many soldiers.

The findings, she said, may seem puzzling because many thought Vietnam veterans had beaten their drug problems many years ago and had resumed normal lives. "The perception might have been that most of the veterans who were addicted to

drugs, especially narcotics such as heroin, stopped using them when they came home from Vietnam," Price said.

The current study is a follow-up to a landmark study conducted as the Vietnam War was ending. In 1972, Lee N. Robins, Ph.D., now University Professor of Social Science in Psychiatry, interviewed about 900 soldiers who had come home from Vietnam the year before. All had been tested for drug use. Three-year follow-up interviews were conducted in 1974, when civilian controls also were added to the sample. The current study tracks the original participants.

About half of the veterans interviewed in Robins' original landmark study came from a general sample of the entire population of enlisted soldiers coming home in September 1971. The other half was chosen because they had tested positive for narcotic use by urinalysis at the time of departure from Vietnam. Of these drug users, estimated to comprise 11 percent of all U.S. Army enlisted men coming home during this period, 77 percent reported in their 1972 interviews that they were dependent on narcotics while in Vietnam.

Robins found that the addiction rate to narcotics among veterans in the general

sample dropped from 20 percent in Vietnam to only 1 percent one year later. Of those addicted in Vietnam, 12 percent relapsed and became re-addicted to narcotics during the three years after coming home.

The follow-up study team is joined by Linda B. Cottler, Ph.D., associate professor of epidemiology in psychiatry, Seth Eisen, M.D., associate professor in the Department of Medicine, and Robins. In 1994, the cumulative death rates stand at 1.4 percent for the non-Vietnam veteran control group, 5.3 percent for the veteran sample who tested negative for drugs at discharge, and 13.5 percent for the veteran sample who tested positive for drugs.

Causes of death noteworthy

Available data in the current study also show that a sizable percentage of deceased veterans who tested positive for drugs died from drug- or alcohol-related causes, according to death certificates. This finding suggests to Price that many of the men who were addicted to drugs when they were coming home may have continued to abuse drugs or alcohol into later life.

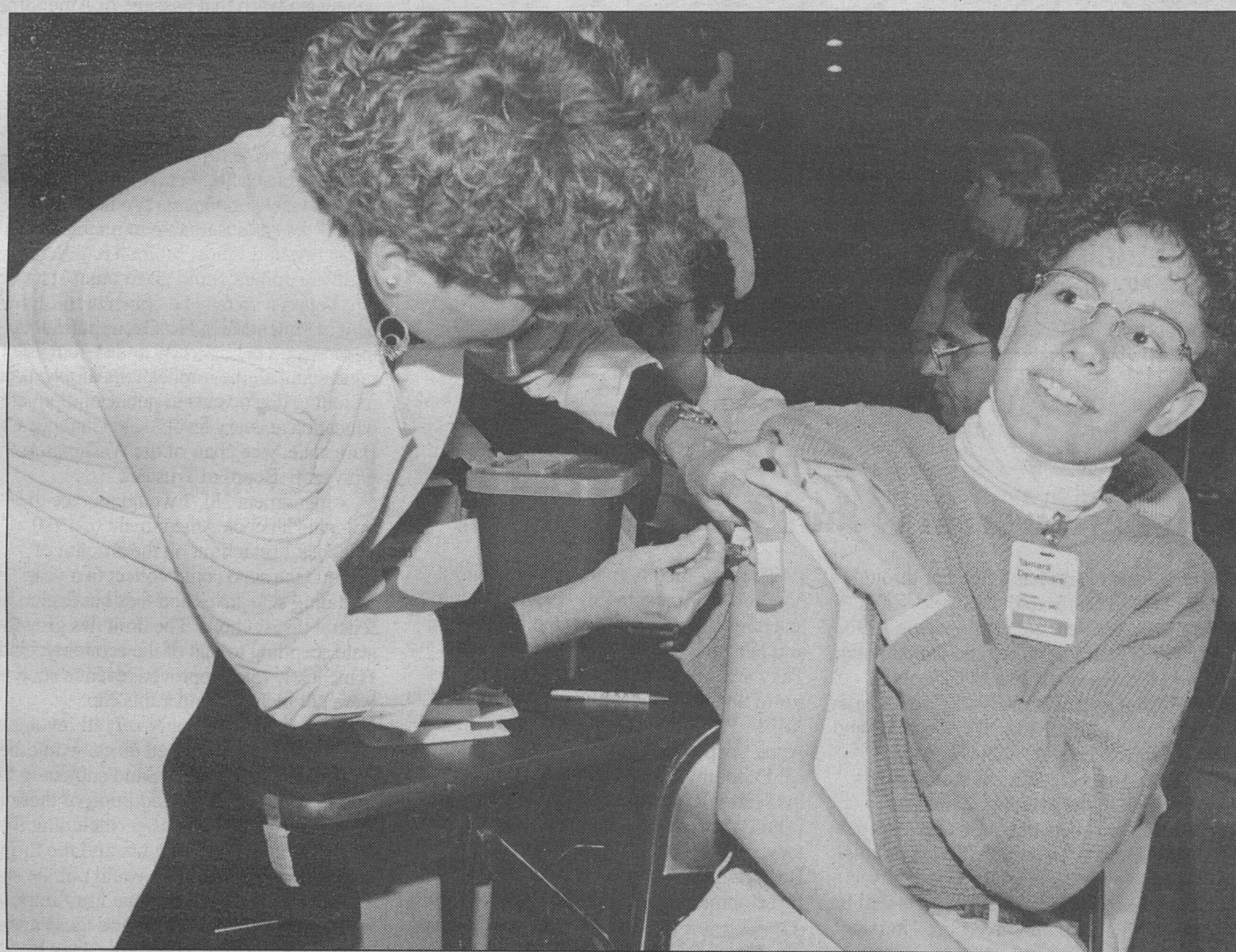
Price said the data are still incomplete and more analyses are needed. She said, however, that the differences in mortality rates are statistically significant and are unlikely to be altered.

The high mortality rates suggest that the outlook for Vietnam veterans with serious drug problems while in the service was not as promising as the somewhat misperceived interpretations of the earlier studies.

The research team has located 93 percent of the surviving men from the original study. In the next phase of the study, the researchers plan to send interviewers all over the country to do in-depth interviews with these surviving veterans.

Drug use is not the only statistically significant predictor of premature death. As noted, the death rate among veterans who tested negative for drugs is still almost four times that in men of similar age and background who did not go to Vietnam. Even though they survived the war, just having been in Vietnam is a risk factor for later premature death, Price said. "I think in the end we will find an effect of service in Vietnam and an effect of drug use in Vietnam," Price said. "That's still a hypothesis at this point, but it appears there is a combined effect that devastated the lives of some of these drug-positive veterans."

— Jim Dryden



Marilyn Miller, R.N., gives Tamara Densmore, M.D., a flu shot. Employee Health Services is offering free flu vaccines to medical school employees and students through November. For a schedule, call 362-3528.

Researchers sequencing DNA faster, discovering new genes

Washington University and other researchers studying the worm *C. elegans* have "spelled out" nearly 10 percent of the organism's DNA sequence, including the longest continuous DNA sequence from any organism to date. In the process, they have sequenced DNA faster than previously was possible and uncovered three times as many genes as had been predicted, according to Richard K. Wilson, Ph.D., research associate professor of genetics and one of the project's principal investigators.

Wilson presented an update on the *C. elegans* sequencing project at the recent Human Genome Conference. The conference is sponsored by the American Association for the Advancement of Science.

Washington University researchers are collaborating with scientists at the Sanger Centre in Cambridge, England, to sequence the entire *C. elegans* genome. The roundworm has six chromosomes containing 100 million nucleotides, the chemical bases that make up the genetic code. So far, the re-

searchers have sequenced 7.8 million bases — nearly all of chromosome three and portions of chromosomes two and X — of the *C. elegans* genome.

The tiny worm has proven to be a treasure trove of genes. More than one-third of the organism's genes are similar to known genes in humans and other organisms. Moreover, the researchers continue to discover a host of "new" genes. "The most important part of the project is that we're finding a lot more previ-

ously unidentified genes than we thought we would," Wilson said.

So far, the researchers have found nearly 1,600 genes in the *C. elegans* genome, Wilson said. About 60 percent of these genes had not been identified previously. The new genes are being recorded into a computer data base, which researchers will be able to search to determine if snippets of human DNA, such as a suspected cancer gene, match those in the *C. elegans* genome.

CenterNet to address research and health services

National Institutes of Health (NIH) Director Harold Varmus, M.D., and David Satcher, M.D., director of the Centers for Disease Control, will be the featured guest speakers in October on CenterNet, the Academic Health Center Television Network.

From 10:30 to 11:30 a.m. Wednesday, Oct. 26, Varmus will address NIH research and increased public accountability. Satcher

will discuss the essential services for public health in a reformed health system from 2 to 4 p.m. Oct. 28.

Both video conferences will be held in Room 601A of the School of Medicine Library. Viewers from medical centers nationwide will be able to ask questions of Varmus and Satcher. For more information or to reserve a seat, call 362-2793.

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Washington
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Washington People

Storandt brings compassion to empirical work

As the debate over the relative merits of teaching vs. research rages on, Martha Storandt, Ph.D., professor of psychology, has resolved it for herself by combining the two. She teaches her students by collaborating on research projects with them.

"She really treats her students like colleagues," said Sara Wilcox, a graduate student who co-authored a paper with Storandt about women's attitudes concerning exercise. "She wants people to pursue research and she realizes that to be successful, you have to be excited about what you are doing. So, although I am not interested specifically in memory and cognitive issues (one of Storandt's main focuses), Dr. Storandt has been extremely open to a variety of topics and has allowed and helped me to define what I am interested in."

In addition to being an outstanding teacher, mentor, and expert on the psychometrics of Alzheimer's disease (determining the differences between memory loss from normal aging and Alzheimer's disease), Storandt has an international reputation in the study of cognitive changes involved in aging. As America's population becomes increasingly elderly, her work has helped change the definition and perception of aging. Even one generation ago, people were considered old at 60, yet now people are enjoying healthy, active lives into their 80s.

"Aging is not just decline and deterioration, there are an awful lot of very positive things that happen in later life too," said Storandt.

Older people often are freed from many responsibilities of their earlier adult life, said Storandt, and can take advantage of that freedom to pursue intellectual growth or follow artistic impulses. Storandt tells many stories of people in their 80s who begin to write, paint or travel, which, she points out, has become a major industry. Many older adults find that they enjoy their grandparenting role the most, Storandt added.

In addition to her empirical work measuring cognitive changes in both healthy older adults and those with Alzheimer's disease, Storandt's projects also involve examining ways to improve the quality of life for the elderly. Those projects include a series of studies in which she and her students examined the effectiveness of memory training skills, and a study on whether exercise improves the memories of elderly people. Her finding in the latter case — that exercise did not enhance memory but did improve morale — has led her to advocate exercise as a way of life for older adults.

"One thing I've always admired about Dr. Storandt is that she can combine compassion with empirical data," said Wilcox. "She really looks at issues in a personal way but always challenges her students to back up their material with data."

The memory skills training project is one example of Storandt's approach. "The question we asked was 'How do we help people deal with one of the problems that they experience as they grow old, which is declining memory ability,'" said Storandt. "I'm not talking about Alzheimer's, but just the normal changes that occur in memory. And what we tried to do in the series of studies is take a look at ways to help people cope with those kinds of problems as they affect their day-to-day tasks, like buying groceries."

Storandt, who arrived at Washington University as a junior from North Little Rock, Ark., 36 years ago, has spent her entire career in St. Louis, most of it at Washington University. After receiving a bachelor's degree in psychology in 1960 and a Ph.D. from the University in 1966, she went on to postdoctoral training with the Veteran's Administration at Jefferson Barracks. Shortly afterward, Storandt was hired as a research assistant professor at Washington University.

In Storandt's family, women were expected to get a degree and, ultimately, to work. Her grandmother had a college degree, her mother worked full time as a school teacher. "So although there are no other college professors in my family, women in my family were expected to get an education," said Storandt. "There was an

expectation that you would work outside the home, and not at a dime store."

Storandt also had two strong Washington University mentors, the late Robert Kleemeier, Ph.D., professor of psychology, and Jack Botwinick, Ph.D., professor emeritus of psychology.

Storandt first met Kleemeier by taking his class on aging as a graduate student on the advice of some more advanced graduate students.

"I thought, 'Well, they've been through the ropes so I'll listen to them, they should have some good advice,'" remembered Storandt. "By the time I got

former mentor Botwinick, also helped establish that center. "We were floundering until we joined forces with Martha Storandt and Jack Botwinick," said Leonard Berg, M.D., professor of neurology and director of the University's Alzheimer's Disease Research Center. "They rescued us and got us funded. The success of our early studies, in which Dr. Storandt participated, was responsible for our being recognized with the center grant that founded the ADRC."

"Even though I am principal investigator on the current program project and the ADRC, I frequently need to call on Dr. Storandt for advice on administrative issues, such

as how to shape an application to put our best face forward, or to rely on her very sophisticated knowledge about fiscal management," said Berg. "There was even a time when we lost our administrative coordinator for the center and for several months Martha filled in there, too."

Storandt's energy and ability to juggle multiple projects is legendary among her students and colleagues.

"She is a very busy woman, but she never gives that air to her students," said Wilcox. "In fact, she often knows what we students are doing better than we know ourselves. She really keeps us on track."

Storandt's colleague David Balota, Ph.D., associate professor of psychology, agrees. "Martha is an energizing force in our department. She has taken on lots of responsibility at the University and departmental level, in addition to her regular teaching and re-

search responsibilities," he said.

One "extra-curricular" activity Storandt has initiated and maintains is a weekly brown-bag session on aging. These sessions give graduate students a chance to present their work and learn what others are doing.

"A lot of the time graduate students get very insulated from anything that's happening around them," said Storandt. "They get so involved in their own work that they don't know what's happening out in the broader perspective. These seminars at least expose students to what everybody else is doing and gives everyone practice at presenting their work. Each student has a chance to present his or her proposal to the group in a think-tank setting. Students discuss what they plan to do and how they plan to structure their study and people give them feedback and come up with a lot of good ideas — it's not just the faculty, the other students come up with good ideas, too. Then, after the students conduct their research, we have them present the results."

On the first Wednesday of the month the seminar is devoted to research ethics. All first- and second-year graduate students are required to attend. In two years they cover 16 topics on research ethics.

"We need to sensitize our students to a range of issues, how to recruit participants, for example, as well as to have them read the ethical guidelines from our profession and to learn what some of the expectations are with regard to research," said Storandt. "In one session, for example, we will talk about 'who owns the data,' because so much of research now is collaborative research. And so," notes Storandt with a grin, "we're going to talk about sharing — something you were supposed to learn in nursery school."

Whether teaching them to share or how to write a grant, Storandt mentors her students with zeal that doesn't stop when she sends them out of the Washington University nest.

"Martha Storandt serves as a real example to me," said Forrest Scogin, Ph.D., a former student of Storandt's and now a professor and director of graduate studies at the University of Alabama Department of Psychology. "When I'm directing students I try to model what I do after how she treated me. Dr. Storandt is utterly supportive of her students. She spends an enormous amount of time with them. She is a good mentor in many ways — she's available, supportive, knowledgeable and helps guides you through and over all the hurdles that face students, both administrative and academic."

"Being my doctoral dissertation adviser was just the beginning," said Scogin. "She has helped my career really move along. I still ask her advice frequently and she still helps me with my career development."

— Debby Aronson



Martha Storandt, Ph.D., professor of psychology, meets with members of her research team, graduate students Sara Wilcox (left) and Christina Smith.

"Aging is not just decline and deterioration, there are an awful lot of very positive things that happen in later life too."

through that two-semester sequence I was really turned on to the topic of aging — primarily, I think, because of Dr. Kleemeier. He was very committed and very interested in the field of aging. He was a very good teacher and I liked him as a person, so I decided 'I'm going to focus on aging.'"

Botwinick, who was hired to replace Kleemeier (who died suddenly from encephalitis shortly before Storandt completed her dissertation), collaborated closely with Storandt and hired her as a research assistant shortly after she completed her Ph.D. Storandt, who was married in 1962, worked part time as a research associate from 1966-1971 while raising her son, who was born in 1968.

After that, Storandt was ready to work full time. In order to do so, she had to write a grant. But Storandt didn't write an ordinary grant, she put together a multi-faceted study of aging and behavior that was the department's first "program project." Her grant encompassed everything from scientific studies to community outreach and included experts in social psychology, psychophysiology, physiology and community nursing homes.

This grant helped solidify the Department of Psychology's Program on Aging and Development, which is widely considered one of the best training programs in the country, in both clinical and experimental differences between older and younger people.

"I think of this as a major blossoming of the program," she said. "We got lots of people involved in studying the question of aging from a wide variety of angles. The grant I wrote was a five-year large-scale research grant and big money. Today I'm sure it wouldn't look as big, but it still looks big."

One of the program's strengths is its affiliation with the Alzheimer's Disease Research Center (ADRC) at the School of Medicine. Storandt, along with her

Calendar

Oct. 20-29



Exhibitions

Biannual Faculty Exhibition. Features works by School of Art faculty. Oct. 28 through Dec. 18. Opening reception: 5-7 p.m. Oct. 28. Gallery of Art, upper gallery, Steinberg Hall. Gallery hours: 10 a.m.-5 p.m. weekdays; 1-5 p.m. weekends. 935-5490.



Films

Thursday, Oct. 20

7 and 9 p.m. Filmboard Foreign Series. "Los Olvidados" (Mexico, 1950). Room 100 Brown Hall. Cost: \$3. **For 24-hour Filmboard Hotline, call 935-5983.**

Friday, Oct. 21

7 and 9:30 p.m. Filmboard Feature Series. "Blue" (1993). (Also Oct. 22, same times, and Oct. 23 at 7 p.m.) Room 100 Brown Hall. Cost: \$3.

Midnight. Filmboard Midnight Series. "Ghostbusters" (1984). (Also Oct. 22, same time, and Oct. 23 at 9:30 p.m.) Room 100 Brown Hall. Cost: \$3.

Monday, Oct. 24

3 p.m. Russian film. "Commissary" by Alexander Askoldov, with English subtitles. Sponsored by Dept. of Russian. Room 219 South Ridgley Hall. 935-5177.

7 p.m. Balkan Film Series. "Time of the Gypsies." Sponsored by Dept. of History. Room 100 Busch Hall.

Tuesday, Oct. 25

7 p.m. Japanese Film Series. "The Makioka Sisters" (1983), with English subtitles. Sponsored by the Dept. of Asian and Near Eastern Languages and Literatures. Room 219 South Ridgley Hall. 935-5156.

Wednesday, Oct. 26

7 and 9 p.m. Filmboard Foreign Series. "Marianne & Juliane" (West Germany, 1982). (Also Oct. 27, same times.) Room 100 Brown Hall. Cost: \$3.

Friday, Oct. 28

7 and 9:30 p.m. Filmboard Feature Series. "The Cook, the Thief, his Wife and her Lover" (1990). (Also Oct. 29, same times.) Room 100 Brown Hall. Cost: \$3.

Midnight. Filmboard Midnight Series. "Psycho" (1960). (Also Oct. 29, same time.) Room 100 Brown Hall. Cost: \$3.



Lectures

Thursday, Oct. 20

2 p.m. Physics seminar. "Flavor and Spin Contents of the Proton in the Quark Model," Ta-Pei Cheng, prof. of physics, U. of Missouri-St. Louis. Room 241 Compton Hall. 935-6276.

4 p.m. Earth and planetary sciences colloquium. "How (and Why) Volcanoes Move," John Dvorak, geophysicist, Cascades Volcano Observatory, U.S. Geological Survey, Vancouver, British Columbia. Room 362 McDonnell Medical Sciences Bldg.

4 p.m. History talk. "Eastern Europe and the Near East: Processes and Tensions of

Change in the Shadow of the West," Max J. Okenfuss and Engin D. Akarli, assoc. profs. of history. Room 113 Busch Hall. 935-5450.

4:30 p.m. Math colloquium. "Some Maximal and Integral Operators Related to Starlike Sets," Richard Wheeden, prof. of mathematics, Rutgers U., New Brunswick, N.J. Room 199 Cupples I Hall.

Friday, Oct. 21

9:15 a.m. Pediatric Grand Rounds. "The Fable of Aesop: Common Ground Between Achondroplasia and Crouzon Syndrome," S. Bruce Dowton, assoc. prof., depts. of Pediatrics and Genetics, and director, Division of Medical Genetics, St. Louis Children's Hospital. Clopton Aud., 4950 Children's Place. 454-2706.

Noon. Left Forum lecture and discussion. "Gender Discrimination in Employment: Status, Law and Litigations," Mary Ann Sedey, attorney. Co-sponsored by Women's Studies Program and Progressive Law Students Organization. Lambert Lounge, Rooms 303-304 Mallinckrodt Center. 935-6808.

Noon. Cell biology and physiology seminar. "Molecular Mechanisms of Viral Envelope Glycoprotein-mediated Membrane Fusion," Robert P. Blumenthal, lab chief, National Cancer Institute, National Institutes of Health, Bethesda, Md. Cori Aud., 4565 McKinley Ave. 362-6950.

Noon. Environmental engineering seminar. "Case Study: Alton, Ill. Privatization of Public Works, Including Streets, Sewers, Wastewater Treatment Plants and Parks," Paul McKee, chair and CEO, Paric Corp., St. Louis. Room 226 Urbauer Hall. 935-8590.

1 p.m. Solid state engineering and applied physics seminar. "Working in the Real World at Hughes Aircraft Company," Rich Livingston, graduate student in electrical engineering. Room 305 Bryan Hall.

4 p.m. Music lecture. "Liszt's 'Angelus' — Revisions and Reflections," Dolores Pesce, assoc. prof. of musicology. Room B-8 Blewett Hall. 935-5581.

4:15 p.m. Philosophy lecture. "Normative Objectivity," Ernest Sosa, prof. of philosophy, Brown U., Providence, R.I. Room 218 Brown Hall. 935-5119.

Saturday, Oct. 22

11 a.m. Civil engineering seminar. "Design Against Distortional Buckling in High Strength Steel Sections," Gregory J. Hancock, prof. of steel structures, School of Civil and Mining Engineering, U. of Sydney, Australia. Room 216 Urbauer Hall. 935-6350.

Sunday, Oct. 23

4 p.m. Assembly Series lecture. William Gaddis, novelist and author of *J.R.*, *The Recognitions* and *A Frolic of His Own*, will deliver the keynote speech for the International Writers Center's "The Writer and Religion" conference. Edison Theatre.

Monday, Oct. 24

3:45 p.m. Physics seminar. "Wetting Transitions on Fractal Surfaces of Carbon Fibers," Peter Pfeifer, prof. of physics, U. of Missouri-Columbia. Room 241 Compton Hall. 935-6276.

4 p.m. Biology seminar. "Transcription Factor — Nucleosome Interactions: Multiple Mechanisms Regulate Factor Binding," Jerry Workman, prof. of biology, Pennsylvania State U., University Park. Room 322 Rebstock Hall.

4 p.m. Physics colloquium. "Using Thoughts to Get Rid of Feelings: Cognitive Tools for Adjusting Emotion," Roy Baumeister, prof., Dept. of Psychology, Case Western Reserve U., Cleveland. Room 103 Eads Hall.

Tuesday, Oct. 25

4 p.m. Diabetes research seminar. "Role of Ademina Nucleotides in Protection From Lethal Endotoxemia," Paul Bertics, assoc. prof., Dept. of Biomolecular Chemistry, U. of Wisconsin, Madison. Sponsored by Dept. of Pathology. Pathology Library, Room 3723 West Bldg. 362-7433.

6 p.m. Social work lecture and panel discussion. "Ethics in Health and Aging," the Rev. Kevin O'Rourke, Center for Healthcare Ethics, St. Louis U. Health Science Center. Panel discussion to follow with social work practitioners and moderated by Nancy Morrow-Harris, assoc. prof. of social work. Brown Hall Lounge. 935-6606.

Wednesday, Oct. 26

8 a.m. Obstetrics and Gynecology Grand Rounds. "Combined Estrogen-androgen Replacement Therapy: Effects on Clinical Symptoms and Lipoprotein Lipids," Barbara Sherwin, prof., depts. of Psychology and Obstetrics and Gynecology, McGill U., Montréal, Quebec, Canada. Clopton Aud., 4950 Children's Place. 362-3122.

11 a.m. Assembly Series lecture. Lerone Bennett Jr., senior editor of Ebony magazine, will give the keynote talk of the Black Arts and Sciences Festival. Graham Chapel. 935-5285.

4 p.m. Biochemistry and molecular biophysics seminar. "Domain Structure of Prothrombin," Alexander Tulinsky, University Distinguished Professor of Chemistry, Michigan State U., East Lansing. Cori Aud., 4565 McKinley Ave.

4 p.m. Physics seminar. "Microscopic Reversibility and Macroscopic Behavior: Physical Explanations and Mathematical Derivations," Joel Lebowitz, prof., Dept. of Mathematics and Physics, Rutgers U., New Brunswick, N.J. Room 204 Crow Hall.

Thursday, Oct. 27

2:30 p.m. Mechanical engineering seminar. "Theory and Applications of Modular Reconfigurable Robotic Systems," I-Ming Chen, research fellow, California Institute of Technology, Pasadena. Room 100 Cupples II Hall. 935-6055.

4 p.m. Molecular oncology seminar. "Molecular Engineering of the Antitumor Immune Response," Drew Pardoll, assoc. prof. of medicine and oncology, depts. of Molecular Biology and Genetics, Johns Hopkins School of Medicine, Baltimore. Third Floor Aud., Children's Hospital.

4 p.m. Chemistry seminar. "The Stereochemistry of Anionic Vinyl Polymerization," Thieo Hogen-Esch, prof. of chemistry, U. of Southern California. Room 311 McMillen Lab.

4:30 p.m. Math colloquium. "Typology and Geometry of Anosov Flows in Dimension 3," Sérgio Fenley, asst. prof. of mathematics. Room 199 Cupples I Hall.

7 p.m. Architecture lecture. "Can Edge Cities Be Made Less Peripheral?" Alex Kreiger, Chan Kreiger Associates Inc., Boston. Steinberg Hall Aud. (A reception will be held at 6:15 p.m.) 935-6200.

Friday, Oct. 28

9:15 a.m. Pediatric Grand Rounds. "New Findings in Personality Development: The Case for Integrating Psychology Into Pediatric Care," Rebecca A. Eder, asst. prof. of psychology and director, Dept. of Psychology, St. Louis Children's Hospital. Clopton Aud., 4950 Children's Place. 454-2706.

11:45 a.m. Continuing medical education seminar. Rupert B. Turnbull Memorial Lectureship and Surgical Grand Rounds. Sponsored by the Section of Colon and Rectal Surgery at Jewish Hospital and the School of Medicine's Division of Human Molecular Genetics and Office of Continuing Medical Education. Continues Oct. 29 at 8 a.m. Brown Room and Steinberg Amphitheatre, Jewish Hospital, 216 S. Kingshighway. To register, call 362-6893.

Noon. Assembly Series lecture. "Why Broadway?" Rocco Landesman, Broadway producer of "Tommy," "Angels in America," and "The Piano Lesson." Edison Theatre.

Noon. Environmental engineering seminar. "Re-engineering RCRA for Recycling — Proposals by EPA: Definition of Solid Waste Task Force," Charles Merrill, Husch & Eppenger, St. Louis. Room 226 Urbauer Hall. 935-8590.

Noon. Cell biology and physiology seminar. "Microtubule Dynamics and Chromosome Movement," J. Richard McIntosh, Dept. of Molecular, Cellular and Developmental Biology, U. of Colorado, Boulder. Cori Aud., 4565 McKinley Ave. 362-6950.

Clarification

Author Nadine Gordimer will read from her works at 4 p.m. Thursday, Oct. 20, as part of the Mr. and Mrs. Spencer T. Olin Conference. The Oct. 13 Record reported she would be giving a lecture titled "Mightier Than the Sword: The Power of the Written Word." That, however, is the title of the conference.

Noon. Physics seminar. "Circumstellar Grains in Meteorites," Thomas Bernatowicz, research assoc. prof., Dept. of Physics. Room 241 Compton Hall. 935-6276.

1 p.m. Geometry seminar. Sérgio Fenley, asst. prof. of mathematics. Room 199 Cupples I Hall. 935-6726.



Music

Sunday, Oct. 23

4 p.m. Annual Liederabend concert. "Song Cycles of Schubert and Schumann." Comments on poetic texts by Paul Michael Lützeler, the Rosa May Distinguished University Professor in the Humanities and prof., Dept. of Germanic Languages and Literatures. Performance features William Workman, baritone, and pianist Seth Carlin, prof. of music. Co-sponsored by the depts. of Music and Germanic Languages and Literatures. Steinberg Hall Aud. 935-5581.

7:30 p.m. University City Symphony Orchestra concert. Features soloist Stephen Hartman on the clarinet performing "Symphony No. 9 in D Minor" by Antonin Dvorak, "Concerto for Clarinet and Orchestra in A Major, K. 622" by W. A. Mozart, and "Les Preludes" by Franz Liszt. Graham Chapel. 935-5581.



Performances

Thursday, Oct. 20

8 p.m. "The Black Swan," a play by Richard Selzer and directed by Henry Schvey, prof. of drama. (Also Oct. 21, 22 and 27-29, same time, and Oct. 23 at 2 p.m.) Part of Edison Theatre's "Stage Left" series. Edison Theatre. Cost: \$12 for the general public and WU faculty and staff; and \$10 for WU students. 935-6543.



Miscellany

Thursday, Oct. 20

4 p.m. Assembly Series reading. Author Nadine Gordimer will read from her works. Part of the 20th Annual Mr. and Mrs. Spencer

Calendar guidelines

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

Calendar submissions should state time, date, place, sponsor, title of event, name of speaker(s) and affiliation, and admission cost. Quality promotional photographs with descriptions are welcome. Send items to Judy Ruhland at Box 1070 (or via fax: 935-4259). Submission forms are available by calling 935-4926.

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

T. Olin Conference, titled "Mightier Than the Sword: The Power of the Written Word." Graham Chapel. (Continues at 10 a.m. Oct. 21 with a panel and group discussion in the Women's Bldg. Lounge.) 935-5285.

Friday, Oct 21

7 p.m. Woman's Club University social gathering. "University Night: Prefixes and Suffixes," a social gathering for members of the faculty and administration. Piper Lounge, Simon Hall. For reservations, call Mary Kay Cerza at 849-2730.

Saturday, Oct. 22

9 a.m.-noon. University College Skill Development Workshop. "Search and Research." Learn strategies for college-level paper writing. Room 102 Eads Hall. Cost: \$20. To register, call 935-6788.

9 a.m.-noon. Creativity workshop. "Mindmapping for Creativity." Author Nancy Margulies will teach the technique of mindmapping and how it enhances creative problem-solving, decision-making, innovative thinking, memory and concentration. Sponsored by the Fine Arts Institute, School of Art. Room 212 Bixby Hall. Cost: \$30 for registered participants; \$35 at the door. For more info. or to register, call 935-4643.

Career service centers hold open houses during Parents Weekend

Nearly 1,000 parents and students' siblings will be on campus Oct. 21-23 to celebrate Parents Weekend 1994.

For the first time, the Career Center, Weston Business Placement Center and Engineering Career Services all will sponsor open houses from 2 to 5 p.m. on Friday, Oct. 21, said Julie Kohn, director of alumni international relations and parent programs. The open houses provide parents with an opportunity to learn about the various schools' career assistance efforts.

The Parents Weekend schedule also includes a Parents Council panel discussion titled "Career Options in the '90s." During the program, a panel of parents will discuss what types of jobs are available in their fields, how to find jobs in those fields and how to succeed once a position is obtained. Neil Caplan, council chair and president of Grefico Mees (USA) Inc., will serve as moderator.

This year will mark Chancellor William H. Danforth's final welcome to parents when he speaks at 10 a.m. Saturday, Oct. 22, in Edison Theatre. Danforth has announced his plans to retire June 30, 1995. After Danforth's welcome, the program will take a

Sunday, Oct. 23

4 p.m. International Writers Center conference. "The Writer and Religion" features writers from across the globe and includes readings, lectures, book signings and panel discussions exploring religion as a subject for literature. (Continues through Oct. 26.) Keynote address by author William Gaddis: 4 p.m. Oct. 23 in Edison Theatre; panel discussions: 10 a.m.-2 p.m. Oct. 24-26 at West Campus Conference Center, 7425 Forsyth Blvd. Free seating on a first-come basis. For a reserved seat at all sessions, the cost is \$25. 935-4889.

Thursday, Oct. 27

8 a.m. Continuing medical education seminar. "Interdisciplinary Symposium on Obstetrics and Gynecology." Ritz-Carlton Hotel, 100 Carondelet Plaza, St. Louis. (Continues Oct. 28 at 8:30 a.m.) To register or for cost info., call 362-6893.

Friday, Oct. 28

3:15 p.m. International Student Resources Group tour. The bus will leave Stix International House for a tour of the Life Sciences Center, Monsanto Corp. 935-4787.

political twist. Former Sen. Thomas F. Eagleton, LL.B., University Professor of Public Affairs, and Murray L. Weidenbaum, Ph.D., Edward Mallinckrodt Distinguished University Professor and director of the Center for the Study of American Business, will debate "The Clinton Presidency: Pros and Cons." Weidenbaum is former chair of the Council of Economic Advisers under President Reagan.

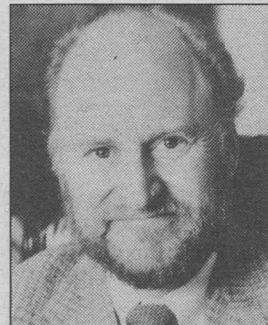
Other weekend highlights include open classes, when parents can join their children in the classroom; a student talent showcase; meetings with deans; a study abroad session; a Gallery of Art tour led by Joseph D. Ketner, gallery director; and a talk titled "Now That You're the Parent of a College Student" by Karen Levin Coburn, associate dean for student development. Coburn is the co-author of *Letting Go: A Parents' Guide to Today's College Experience*, now in its second edition.

Parents Weekend is run by the Office of Alumni and Development Programs in conjunction with the Division of Student Affairs. For more information, call Eric Jacobson, Parents Weekend assistant, at 935-7447.

Broadway producer featured in Assembly Series

Award-winning theater producer Rocco Landesman returns to his native St. Louis to give a lecture, titled "Why Broadway?" at noon Oct. 28 in Edison Theatre. The lecture, part of the Assembly Series, is free and open to the public.

Since 1987, Landesman has been president of Jujamcyn Theaters, a company credited with revitalizing Broadway by taking an active role in the initiation, production and presentation of new works for the Broadway stage. Jujamcyn Theaters owns and operates five theaters in New York's Theater District: the St. James, the Martin Beck, the Walter Kerr, the Eugene O'Neill and the Virginia. The company was founded in 1956.



Rocco Landesman

District: the St. James, the Martin Beck, the Walter Kerr, the Eugene O'Neill and the Virginia. The company was founded in 1956.

Prior to his appointment at Jujamcyn Theaters, Landesman co-produced two Broadway musicals, "Big River" — a musical version of *Huckleberry Finn* and winner of the 1985 Tony Award for best musical — and Stephen Sondheim's "Into the Woods." The many shows Jujamcyn has been associated with as producer or investor since Landesman joined the company include "Tommy," "Angels in America," "Jelly's Last Jam" and "Guys and Dolls."

Between 1974 and 1978, Landesman taught dramatic literature and criticism at the Yale University School of Drama. He has written for many publications, including the Wall Street Journal and The New York Times.

A lover of risk, Landesman left Yale University to work in the stock market and on the race track, as an owner of racehorses.

This talk is co-sponsored by Edison Theatre, the Performing Arts Department, Student Union and Washington University Students for the Arts. For more information, call 935-5297.

Tyson celebrates 30th anniversary with wolf howl

Tyson Research Center is celebrating its 30th anniversary with an open house and wolf howl Oct. 30 at the gatehouse and main administration building. The free event is open to the Washington University community.

Attendees should dress casually for the event, which features a field science experience, strolling bluegrass musicians, and light fall refreshments, such as apple cider and popcorn.

Photographs of Tyson by David Kilper, assistant director, University Photographic Services, will be on display.

The open house runs from 3:30 to 5:30

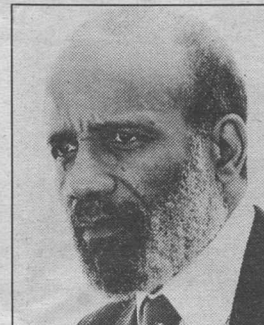
p.m., to be followed by the wolf howl, which is being held in cooperation with the Wolf Sanctuary. The sanctuary is located on the Tyson property. After dark a human wolf stimulus specialist will entice wolves to howl. Richard Coles, Ph.D., director of Tyson Research Center, said he expects two to three dozen wolves to respond. Guests will stand back 100 yards from the wolves.

The event is sponsored by the Friends of Tyson. Guests should R.S.V.P. by calling Darlene Marlow at 727-2325 by Oct. 28. Tyson Research Center is located at the Beaumont/Antire Road exit off Interstate 44 in Eureka.

Ebony magazine editor keynotes Black Arts and Sciences Festival

Journalist and historian Lerone Bennett Jr. will lecture as part of the University's Assembly Series at 11 a.m. Wednesday, Oct. 26, in Graham Chapel. His lecture, which keynotes this year's Black Arts and Sciences Festival, is free and open to the public.

Bennett is senior editor at Ebony magazine and former editor of Jet magazine.



Lerone Bennett Jr.

Throughout his journalism career he has maintained a commitment to shaping the cultural life of African-Americans. Bennett's commitment to chronicling the African-American presence in and contribution to American society also is stated through his work as an historian. His published historical works include *Black Power U.S.A.: The Human Side of Reconstruction 1867 to 1877*, published in 1967, and *Wade in the Water: Great Moments in Black History*, published in 1979.

The 1994 Black Arts and Sciences Festival is slated for Oct. 23-29. The theme of the event, which celebrates black achievement, is "Survivors of One Struggle, Warriors of Another." All events are free and open to the public, unless otherwise noted.

During a panel discussion titled "Black Men/White Men: Can We Talk?" 10 male students will discuss the racial climate on campus between the two groups. The session, which will be held at 7 p.m. Wednes-

day, Oct. 26, in Room 215 Rebstock Hall, marks the third time the men have met to discuss similar issues.

The festival also features a talk by U.S. Rep. Alan Wheat, (D-Mo.), who is running for the U.S. Senate; a panel discussion titled "Blacks in Higher Education: The Power of the Ph.D." and another on "The Impact of Healthcare Reform on the Black Physician and the Black Community"; and a semi-formal dance titled "Celebrating Our Royal Heritage." The dance, which is not open to the general public, will be held at 9 p.m. Oct. 29, at the St. Louis Marriott Pavilion Hotel, 1 S. Broadway. The cost is \$7.

A charity comedy night to benefit Blacks Assisting Blacks Against AIDS, a St. Louis-based organization, will be held at 8 p.m. Oct. 28 in Graham Chapel. Professional comedians Carl Banks and Alonzo "Hamburger" Jones will provide the entertainment. Tickets are \$5 for Washington University students, faculty and staff and \$7 for the general public. Tickets may be purchased at the Edison box office. For more information, call 935-6543.

The Black Arts and Sciences Festival is co-sponsored by Washington University's Mellon Fellows, National Society of Black Engineers, Black Pre-Med Society, Student Educational Service, College Democrats, Office of Student Activities, Business Minority Council, Black Alumni Council, Congress of the South Forty and Student Union.

For more information about the lecture, call 935-5297. For information about the festival, call the Office of Student Activities at 935-5994.

Sports

The following is compiled by Mike Wolf, director of sports information, and David Moessner, assistant director.

Football

Last Week: Washington 36, Carnegie Mellon 25

This Week: 1 p.m. Saturday, Oct. 22, at University of Rochester, Rochester, N.Y.

Season Record: 5-2 (2-0 UAA)

Last week's win over Carnegie Mellon put Washington in the driver's seat for a first UAA championship. The only team without a league loss, the Bears can clinch a share of the UAA title by winning one of their next two games.

After falling behind 12-7 midway through the second quarter, the Bears took command of the UAA showdown by scoring the game's next 22 points. Sophomore Chris Nalley, Ferris, Texas, recovered a bold onside kick and, from there, first-year quarterback Thor Larsen, Nevada City, Calif., led the Bears on a game-clinching 42-yard drive. Tight end Chris Cox, Cincinnati, corralled two touchdown catches from Larsen and also nabbed an aerial for a two-point conversion.

Women's Volleyball

Last Week: Brigham Young University (BYU)-Hawaii 3 (5, 12, 15, 15, 15), Washington 2 (15, 15, 9, 12, 7); Washington 3 (7, 15, 11, 15, 15), Hawaii Pacific 2 (15, 11, 15, 5, 11); Hawaii-Hilo 3 (12, 15, 15, 9, 15), Washington 2 (15, 10, 9, 15, 6)

This Week: Friday-Saturday, Oct. 21-22, Washington University National Invitational, Field House

Season Record: 26-2 (7-0 UAA)

The loss at BYU-Hawaii snapped Washington's 31-match winning streak that dated back to last November.

Men's Soccer

Last Week: Washington 1, Maryville 0; Washington 1, Wheaton 0; Washington 2, Chicago 0

This Week: 1 p.m. Friday, Oct. 21, at Emory University, Atlanta; 11 a.m. Sunday, Oct. 23, at New York University, New York

Season Record: 11-3-2 (3-0-1 UAA)

Last week's wins vaulted Washington to the No. 2 rung in the South Central Region poll, after entering the week at the No. 4 spot.

Against Maryville first-year student Darrell Zechman, Madison, Wis., scored his fourth goal in three games to provide the winning margin. On Friday, sophomore Justin Reed, Kansas City, Mo., tallied his 10th goal of the season with 10 minutes remaining to give the Bears a 1-0 win over Wheaton.

Women's Soccer

Last Week: Washington 2, DePauw 0; Washington 9, Maryville 0; Chicago 2, Washington 0

This Week: 3:15 p.m. Friday, Oct. 21, at Emory University, Atlanta

Season Record: 6-8-1 (0-4-0 UAA)

Against DePauw, first-year student Becky Harding, Indianapolis, scored both goals — the first two of her career — within the first 25 minutes of the match.

Women's Tennis

Last Week: Washington 7, Chicago 2; Washington 9, Wheaton 0; Washington 8, Augustana 1

This Week: Fall season concluded. Spring campaign begins March 6.

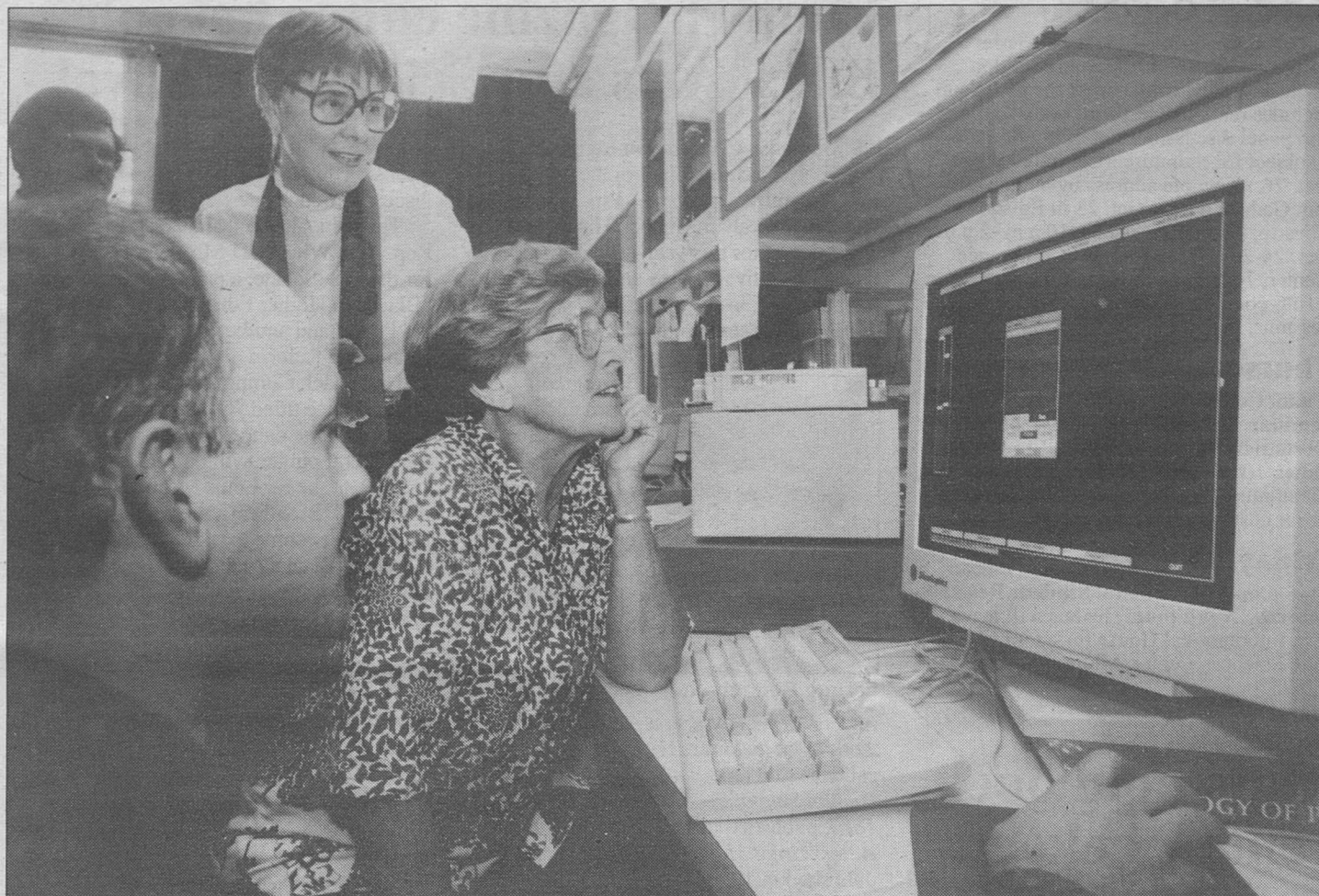
Current Record: 6-0

The Bears capped a perfect 6-0 fall campaign by storming past three opponents by a 24-3 margin last week. Senior Tara Salamone, Greenlawn, N.Y., led the charge by posting 3-0 marks in both first singles and first doubles. Salamone's doubles partner, sophomore Nida Poosuthasee, Evansville, Ind., also registered an unblemished 3-0 mark in second singles.

Men and Women's Cross Country

Last Week: Idle

This Week: Saturday, Oct. 22, at UAA Championships, Baltimore.



From left, Christophe Reuzeau, Ph.D., research associate in biology, Barbara Pickard, Ph.D., professor of biology, and emeritus trustee Gladys Levis Allen view the 3-D image of the molecular structure near a sensory apparatus in a plant cell.

Former student helps fund researcher's efforts — from page 1

curiosity about plants by taking Biology 309, a course that Pickard taught. One focus of the course was Pickard's evolving theory on how plant development and response to the environment is coordinated, a theory that did not meet with immediate acceptance by plant biologists, but one that, based on work supported by the Allens, is gaining widespread interest and respect. The heart of Pickard's model is the plant's mechanically activated calcium channels, affected by electrical, thermal and chemical signals.

"Gladys was excited about the theory and understood its predictions in great detail," Pickard recalled in her comments. "You have to remember that as an undergraduate, Gladys specialized in animal

developmental biology, and Viktor Hamburger, who also influenced me greatly, was her hero. So, she had an intellectual framework on which to base her ideas.

"Gladys contributed a great deal to Biology 309. I remember it as the best year of any I have ever taught. Gladys was a lively presence, asking good questions and catalyzing enthusiasm in the other students. She made friends with the students and stimulated their learning."

Shortly after her coursework with Pickard, Gladys Levis married Glenn Allen. Their funding augments other support from the National Science Foundation and NASA, and prompted expanded funding from those agencies.

Pickard said she wanted to celebrate the naming of the laboratory at a time when her theory on plant sensory mechanisms had gained wide interest.

"Glenn and Gladys have matched their monetary support with intellectual and emotional support and encouragement," Pickard said. "Their expression of faith has been strengthening. We're grateful to Gladys and Glenn Allen for sharing the vision of this laboratory almost from its inception, and for enabling us to work out methodologies to test it and for their enthusiasm for generating still newer ideas for how plants cope with environmental and developmental challenges."

— Tony Fitzpatrick

Conroy, Miller, North, Sherraden recognized for excellent teaching — from page 1

discovered a 13-million-year-old fossilized jawbone, believed to be an important clue to finding the missing link between apes and humans. He has been honored many times by the medical student body for the quality of his teaching in human anatomy, and was named Teacher of the Year by both the first-year and senior medical classes. In addition to his busy teaching schedule, Conroy has participated on many University committees, including the Curriculum Evaluation Committee and the Committee for Academic Review.

MILLER, recognized widely for the excellence of his teaching, joined the John M.

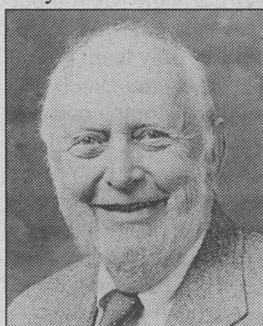


Gary J. Miller

Olin School of Business in 1986 as professor of political economy and fellow in the Center in Political Economy. He was named the Reuben C. Taylor Jr. and Anne Carpenter Taylor Professor of Political Economy in 1988. He has been named Teacher of the Year by his students four times. Miller's area of expertise centers on political decision-making within the enterprise and on the impact on business enterprises of legislative and regulatory decisions. As chair of Olin's undergraduate curriculum committee, Miller has made substantial changes to the undergraduate curriculum.

NORTH joined the Washington University faculty in 1983. In 1993 he was named co-recipient of the Nobel Memorial Prize in Economic Sciences in recognition of his research on the economic history of the United States and Europe and for his contributions to the study of how economic and political institutions change over time. North has spent more than 50 years addressing

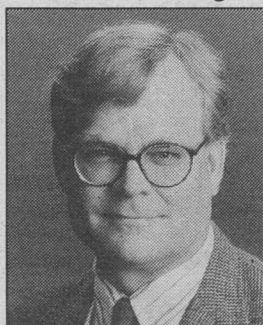
complex variations of a simple question: Why do some countries become rich, while



Douglass C. North

others remain poor? On the day he learned of his winning the Nobel Prize, North demonstrated his deep commitment to teaching; he set aside the demands of reporters to be in his morning class on time.

SHERRADEN, Ph.D., recently was named director of the George Warren Brown



Michael W. Sherraden

School of Social Work Center for Social Development, which studies social issues and innovations. He joined the faculty as assistant professor in 1979. His professional interests include welfare policy, youth policy and employment policy. He is noted for an innovative approach to longstanding policy issues, drawing often from U.S. history and from the experience of other nations. Sherraden teaches in the master's and doctoral programs, as well as in the FOCUS seminar program for first-year students. During 1992-93, he studied the savings-oriented domestic policy of Singapore as a Fulbright scholar.

Sherraden conceived the idea of asset-

based social policy, which suggests that social policy should play a role in promoting savings and investments. His proposals have been part of policy development in the U.S. Congress and in several states. As part of his welfare reform plans, President Bill Clinton included Sherraden's proposals to raise asset limits and create a demonstration of Individual Development Accounts, a structured savings program for the poor.

Mayors, architects discuss city design

The School of Architecture will host the "Mayors' Institute on City Design: Midwest" Oct. 27-29.

The institute, which is sponsored by the National Endowment for the Arts (NEA), provides a forum for an invited group of mayors to meet with architects and designers to discuss all aspects of city design — architecture, landscape architecture, historic preservation, growth planning and management, urban design and development. This is the second of three annual institutes hosted by Washington University.

This year the conference will focus on the "edge city concept," which institute director John Hoal describes as "cities on the fringe of a major metropolitan center." These cities, he said, have all the facilities of normal downtowns, in contrast to suburbs, which still rely on cities for many functions. Both Clayton and Chesterfield, for example, are fringe cities of St. Louis.

The mayors attending this year are Joel Campbell of Dublin, Ohio; Wallace Davis of East Cleveland, Ohio; Lorraine Morton of Evanston, Ill.; Robert Bennett of Livonia, Mich.; Carol Opel of Waukesha, Wis.; and John Roof of Waterloo, Iowa.

Alex Krieger, professor of architecture and urban design and director of the master's program at Harvard University, will deliver the keynote address at 7 p.m. Thursday, Oct. 27, in Steinberg Hall Auditorium. Krieger's talk, which is free and open to the public, is titled "Can Edge Cities Be Made Less Peripheral?" Krieger, who also is a principal in the firm Chan Krieger Associates in Boston, has won numerous awards for his work.

"Many of the decisions that mayors have to make deal with physical planning and design of their cities," said Cynthia Weese, FAIA, dean of the School of Architecture and one of the conference participants. "It is extremely important that mayors form partnerships with others — architects, planners and urban designers — to help them make informed, wise decisions."

Hoal, who also is assistant professor of architecture at Washington University and acting director of urban design for the city of St. Louis, added, "Mayors are the focus of the institute because they are uniquely situated to be powerful advocates for good design in their communities."

Each institute brings together a group of mayors and design professionals. The agenda includes presentations on general city design topics as well as discussions of specific design issues selected by the participating mayors.

The design professionals represent a broad interdisciplinary group comprising experts in architecture and urban design, historic preservation, landscape architecture, developers and sociologists as well as three NEA representatives.

Campus Watch

The following criminal incidents were reported to the Hilltop Campus Police Department Oct. 10-17. Readers with information that could assist the investigation of these incidents are urged to call 935-5555. This release is provided as a public service to promote safety awareness on campus.

Oct. 10

7:34 a.m. — Unknown person(s) reportedly damaged pressure gauges and copper pipes at the construction site by Fraternity Row sometime between 4 p.m. Oct. 7 and 7 a.m. Oct. 10.

7:50 a.m. — Copper piping was reported stolen from the psychology building construction site sometime between 4 p.m. Oct. 7 and 7 a.m. Oct. 10.

9 a.m. — A table belonging to the Office of Student Affairs was reported stolen from the basement of the Women's Building sometime between 8:30 a.m. Oct. 6 and 8 a.m. Oct. 10.

Oct. 11

9:17 a.m. — A double-headed parking meter belonging to the Transportation Department was reported stolen from the northwest corner of the South Forty parking lot sometime between 2 p.m. Oct. 10 and 9 a.m. Oct. 11.

Oct. 12

7:59 p.m. — **The Campus Police Department issued a crime alert for the following incident:** An employee's wife was robbed while sitting in her vehicle in the parking lot by Wohl Center at 7:55 p.m. A subject, described as a 5-foot, 10-inch, 150-pound black male in his late teens to early 20s with a light beard, reportedly ap-

proached the vehicle and began banging on the passenger side window. The subject then reached inside the window and removed the woman's purse. He and another male left the area in a light-colored vehicle.

Oct. 13

12:35 p.m. — A car radio was reported stolen from a student's vehicle parked in the lot by Bixby Hall.

Oct. 14

9:05 a.m. — A wooden picnic table belonging to the Department of Facilities Planning and Management was reported stolen from the maintenance building sometime between 1 p.m. Oct. 13 and 8:30 a.m. Oct. 14.

5:19 p.m. — A trash receptacle belonging to the Department of Facilities Planning and Management was reported stolen from the east side of Mallinckrodt Center at 11:50 p.m. Oct. 13.

9:37 p.m. — A student's purse was reported stolen from Room 407 McMillan Hall sometime between 5 and 6:30 p.m.

Oct. 16

1:35 a.m. — Unknown person(s) reportedly threw rocks at the windows of Alpha Epsilon Pi, causing damage.

Angeles named acting director, photo services

Joe Angeles has been named acting director of Photographic Services, announced M. Fredric Volkmann, vice chancellor for public affairs. Angeles succeeds Herb Weitman, who retired in August and was director for more than 30 years.

Angeles, who has been a staff photographer at Washington University since 1988,



Joe Angeles

was named senior photographer in 1993. Before joining the University he was a staff photographer for the St. Louis Suburban Journals from 1984 to 1988. He was a photographer for the St. Louis Business Journal from 1983 to 1984 and a reporter and photographer for the Cuba (Mo.) Free Press in 1982.

As acting director, Angeles is responsible for assigning the workload in Photographic Services and for maintaining communication with departments throughout the University. Additionally, he is the department's liaison with the vice chancellor for public affairs, the assistant vice chancellor and the senior director of publications.

Angeles received a bachelor's degree in communications in 1982 from Missouri Southern State University in Joplin.

Introducing new faculty members

Hilltop Campus:

Michael L. Gross, Ph.D., professor of both chemistry and medicine, comes from the University of Nebraska in Lincoln, where he was a professor of chemistry. He also was director of the university's Midwest Center for Mass Spectrometry, the topic of his research interest. He received a bachelor's degree in chemistry in 1962 from St. John's University in Collegeville, Minn., and a doctorate in chemistry from the University of Minnesota in Minneapolis in 1966.

Jay R. Turner, D.Sc., assistant professor of both engineering and policy and chemical engineering, was a research assistant at the Washington University Chemical Reaction Engineering Laboratory from 1987 to 1994. His research interests focus on gas-solid catalytic reactors and their impact on air pollution as well as air pollution policy. He received bachelor's and master's degrees from the University of California, Los Angeles, in 1987 and a doctor of science degree in 1993 from Washington University, all in chemical engineering.

Zhong Zhang, Ph.D., assistant professor of marketing, comes from the University of Michigan in Ann Arbor, where he taught macroeconomics and microeconomics. His research interests include trade policy and international industrial competitiveness. He received a bachelor's degree in the philosophy of science and engineering automation at Huazong University, the University of Science and Technology in Wuhan, China, in 1982. He received a master's degree and doctorate in history and the sociology of science and technology from the University of Pennsylvania in Philadelphia in 1985 and 1989. He received a master's degree and doctorate in economics from the University of Michigan in Ann Arbor earlier this year.

Medical Campus:

Matthew J. Matava, M.D., assistant professor of orthopedic surgery, comes from the Cincinnati Sports Medicine and Orthopedic Center, where he received a 1993-94 sports medicine and arthroscopic surgery fellowship. His research interests include basic science and clinical projects concerning ligament reconstruction of the knee. He received both a bachelor's degree in biology and a medical degree from the University of Missouri-Kansas City.

For The Record

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

Of note

Diana R. Blanchard, fundraising coordinator for the Consortium For Graduate Study in Management, graduated from the St. Louis Coro Midwestern Center's Women in Leadership's 29th class. The consortium, which is based at Washington University, provides fellowships for talented minorities. ...

C. Robert Cloninger, M.D., Wallace Renard Professor of Psychiatry and professor of genetics, and **Theodore Reich, M.D.**, Samuel and Mae S. Ludwig Professor of Psychiatry and professor of genetics, each have received three-year grants from the National Institute of Mental Health. Cloninger received a \$699,939 grant for a project on "Diagnostic Center for Linkage Studies of Schizophrenia." Reich received a \$699,938 grant for a project titled "Diagnostic Center for Linkage Studies of Bipolar Disorder." ...

Colin P. Derdeyn, M.D., instructor in radiology at the School of Medicine's Mallinckrodt Institute of Radiology (MIR) and a fellow in MIR's neuroradiology section, received the Siemens Medical Systems/Radiological Society of North America Research and Education Fund Fellowship. Using positron emission tomography, Derdeyn will track blood flow and metabolism of the brain in patients at risk for stroke. The fellowship carries a \$30,000 stipend. ...

Enrico Di Cera, M.D., assistant professor of biochemistry and molecular biophysics, received a \$132,000 three-year grant from the American Heart Association for a project on "Studies on the Slow and Fast Conformations of Thrombin." ...

Joel A. Goebel, M.D., assistant professor of otolaryngology, received the Honor Award from the American Academy of Otolaryngology-Head and Neck Surgery. He received the award during the academy's 98th annual meeting held in San Diego. The award recognizes

those who have contributed service to the academy without remuneration. In addition, he received a \$10,000 grant from the American Hearing Research Foundation for a project on "Bedside High Frequency Monitoring for Ototoxicity." ...

Weibiao Hsu, a graduate student in earth and planetary sciences, received a \$2,000 short-term visitor fellowship from the Smithsonian Institution to study meteorites. ...

Kimberlee C. Recchia, M.D., instructor of pediatrics, received an \$8,800 grant from the Ambulatory Pediatric Association for a project titled "Prospective Evaluation of Residents' Community-based Continuity Experience and Comparison to General Pediatric Practice." ...

V. Leroy Young, M.D., professor of plastic and reconstructive surgery, received a \$75,000 grant from the Plastic Surgery Educational Foundation for a project titled "Biomechanical Analysis of Explanted Breast Implants."

Speaking of

John R. Blecke, Ph.D., associate professor of chemistry, presented a poster on "Thiapentadienyl-Iridium-Phosphine Chemistry" at the Organometallic Gordon Conference in Plymouth, N.H. ...

Victor T. Le Vine, Ph.D., professor of political science, facilitated a conference on world ethnic conflicts in New York. The conference was sponsored by the Centre for International Understanding, of which Le Vine is president. Among the participants were diplomats from United Nations and foreign missions in New York and Washington, D.C. ...

During the Inhomogeneous Phases and Pattern Formation Conference at the Université Libre de Bruxelles (The Free University) in Brussels, Belgium, **Ronald Lovett, Ph.D.**, professor of chemistry, delivered a lecture titled "Thermodynamic and Statistical Descriptions of Non-uniform Fluids." ...

Interstellar dust in primitive meteorites was the topic of two talks presented at international conferences by **Ernst**

Zinner, Ph.D., research professor of physics and a member of the McDonnell Center for the Space Sciences. He presented the papers at the XXII General Assembly of the International Astronomical Union in The Hague, Netherlands, and at the Third International Symposium on Nuclear Astrophysics in Gran Sasso, Italy.

On assignment

For the fourth consecutive year, **Evy Warshawski**, managing director of Edison Theatre, is a panelist for the Mid-America Arts Alliance Multidisciplinary Advisory Committee. In addition to Missouri, the regional arts organization serves the states of Kansas, Arkansas, Texas, Nebraska and Oklahoma.

To press

Three poems by **Carter Revard, Ph.D.**, professor of English, are published in the 1994 anthology *Returning the Gift: Poetry and Prose From the First North American Native Writers' Festival*. His published works are titled "Cities," "A Brief Guide to American History Teachers" and "When Earth Brings." He also served as a panelist during a discussion of contemporary poetry and fiction at the Oklahoma Book Festival held at Will Rogers State College in Claremore, Okla. ...

Christine Ruane, Ph.D., assistant professor of history, published an article on "Fashion and Its Importance for Russian History" in the October 1994 issue of *Obshchestvennye Nauki and Sovremennost* (Social Sciences and Modern Times). The journal is a publication of the Russian Academy of Sciences.

Guidelines for submitting copy:

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

School of Engineering presents teaching, research awards

The School of Engineering and Applied Science recently held its first Faculty Recognition Reception in the Lopata Hall Gallery. Dean Christopher I. Byrnes, Ph.D., honored the faculty in three categories: teaching awards, faculty awards and donations and equipment.

Faculty were cited for the following teaching awards received during the past academic year: Massoud Amin, D.Sc., visiting assistant professor of systems science and mathematics, and Jay R. Turner, D.Sc., assistant professor of both engineering and policy and chemical engineering, Washington University professors of the year; Phillip L. Gould, Ph.D., Harold D. Jolley Professor and chair of civil engineering, Outstanding Engineer in Education Award from the Missouri Society of Professional Engineering; Richard Grodsky, D.Sc., assistant professor of electrical engineering, 1994 Education Award presented by the Institute of Electrical and Electronics Engineers Inc.'s St. Louis section; and Jonathan S. Turner, Ph.D., professor and chair of computer science, Distinguished Faculty Award at Founders Day.

Individuals honored for faculty awards were: Byrnes and Alberto Isidori, Ph.D., part-time professor of systems science and mathematics, Best Paper Award from the International Federation of Automatic Control at the federation's World Congress in Sydney, Australia; Andrew D. Dimarogonas, Ph.D., William Palm Professor of Mechanical Design, appointment as visiting Russell Severance Springer Professor of Mechanical Engineering at the University of California, Berkeley; Milorad Dudukovic, Ph.D., Laura and William Jens Professor of chemical engineering and director of the Chemical Reaction Engineering Labora-

tory, the R. H. Wilhelm Award in Chemical Reaction Engineering and election as a fellow of the American Institute of Chemical Engineers;

Rodolphe L. Motard, D.Sc., professor of chemical engineering, election as a fellow of the American Institute of Chemical Engineers; Sally Goldman, Ph.D., associate professor of computer science, and Bixio Rimoldi, Dr. Tech.-Sci., associate professor of electrical engineering, National Science Foundation's National Young Investigator Awards; Michael I. Miller, Ph.D., professor of electrical engineering, invited to read a paper on "Representations of Knowledge in Complex Systems" before the Royal Statistical Society; David A. Peters, Ph.D., professor of mechanical engineering, election as a fellow of the American Society of Mechanical Engineers.

T. J. Tarn, D.Sc., professor of systems science and mathematics, Japan Foundation for the Promotion of Advanced Automation Technology's best research article award; Jonathan S. Turner, IEEE Koji Kobayashi Computers and Communications Award; Ning Xi, D.Sc., a former graduate student and now a research assistant professor of systems science and mathematics, Anton Phillips Best Student Paper Award from the IEEE Robotics and Automation division; and George I. Zahalak, Eng. Sc.D., professor of mechanical engineering, appointment as honorary research fellow by the Department of Engineering Science, the University of Auckland in New Zealand.

Four faculty members were honored for helping to secure donations and equipment for the school. Ronald S. Indeck, Ph.D., associate professor of electrical engineering, enabled the Department of Electrical Engineering to receive IBM magnetic recording test equipment valued at \$500,000, along with magnetic record-

ing tests and other test equipment also valued at the same amount from the Digital Equipment Corp. William D. Richard, Ph.D., associate professor of electrical engineering, helped acquire a donation, valued at \$30 million, by Mentor Graphics Corp. The donation allows the school 20-seat access to the Mentor Graphics computer-aided engineering software system. Barry Spielman, Ph.D., professor and chair of electrical engineering, was cited for his role in the department's receipt of \$440,000 in electromagnetic engineering instructional software from Compact Software. Jonathan S. Turner was recognized for his role in securing an equipment donation worth \$200,000 from SynOptics for the campus-wide network.

Psychological center offers therapy groups

The Psychological Service Center is offering therapy for three groups of people: women aged 22 and older who binge eat or are obsessed with eating; female adult survivors of childhood sexual abuse (CSA); and men and women with depression.

The eating disorders group, which is limited to eight members, will meet from 6 to 7:30 p.m. on Thursdays for seven weeks. The CSA group, which also is limited to eight members, will meet from 6 to 7:45 p.m. on Wednesdays for three months. The depression groups, for men and women aged 24-55, will meet from 5:30 to 7:30 p.m. on Tuesdays for 10 weeks beginning this month. Each depression group is limited to 10 members.

For more information, call 935-6555.

Opportunities & personnel news

Hilltop Campus

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

Secretary/Receptionist

950055. *Student Affairs*. Requirements: Some college; typing 50 wpm with accuracy; ability to interact and maintain positive relationships; pleasant disposition in dealing with students, staff and general public; flexibility; detail-oriented team player; ability to set priorities and work on numerous tasks with constant interruption; willingness to work flexible hours if necessary; high service orientation; sense of humor essential. Clerical tests required.

Associate Engineer

950059. *Academic Computing Network*. Requirements: Bachelor's degree in computer science, electrical engineering or comparable experience; working knowledge of TCP/IP networks, LANS, WANS, Novell and Appletalk; familiarity with a variety of computing environments, including Macintosh, DOS, and Windows PC, OS/2 and UNIX; strong problem-solving skills; good verbal and written communication skills; system administration experience desirable. Resume required.

Administrative Secretary

950083. *Accounting Services*. Requirements: College degree, business or vocational school; five years secretarial experience; typing 60 wpm with accuracy, including statistical typing; excellent interpersonal communication skills, particularly on the telephone; personal computer word processing, including WordPerfect for Windows; Lotus, and E-Mail; excellent grammar, punctuation and spelling skills; ability to

participate on various types of teams and projects to achieve the goals of Accounting Services. Clerical tests required.

Medical Sciences Writer

950089. *Medical Public Affairs*. Requirements: A college or university degree, preferably in journalism or communications, with a specialization in medical and/or science writing; a graduate degree is highly recommended; approximately five years professional experience with the media and public relations; demonstrated knowledge of media requirements and operations; demonstrated skill in writing and editing; ability to plan, organize and implement a regular program of developing medical/science features; ability to work well with others and to supervise their work as needed; ability to work effectively with faculty, administrators and researchers. Resume required.

Deputized Police Officer

950096. *University Police*. Requirements: Completion of 640 hours of approved academy training to be certified; must meet current police officer standards and training commission standards for certification as a peace officer in a first class county in Missouri; ability to qualify for deputization as a police officer by the St. Louis County Police Department; current valid Missouri driver's license. Application required.

Writing Skills Specialist, Part time

950098. *Student Educational Service*. Requirements: Master's degree; teaching experience at the secondary or post-secondary level; knowledge of the problems of the academically underprepared student. Resume required.

Library Assistant

950104. *John M. Olin School of Business*. Requirements: Two years of college, bachelor's degree preferred; knowledge of word processing package (all-in-1 and

WPS-Plus software, Digital equipment preferred); some knowledge of University FIS system preferred; attention to detail; ability to interact well with library users; ability to explain and interpret library policies; ability to work independently with minimal supervision; typing 35 wpm with accuracy. Clerical tests required.

Senior Project Leader

950106. *Computing and Communications*. Requirements: Minimum five years data processing experience; proven ability to design, program and install major data processing systems; proven ability to lead others in data processing project development; proven ability to design, write and install MANTIS and COBOL; IBM mainframe and personal computer experience desired. Resume 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.

Programmer Analyst

WUSBCS-JH WUSBCS. Requirements: Bachelor's degree in computer science; two to three years experience in application support and one year experience in programming; extended background in Mumps programming, IDX applications, program maintenance and user support.

Programmer Analyst

WUSBCS-JH WUSBCS. Requirements: Bachelor's degree in computer science; two to three years of application support and one year of programming; experience with HL7, RDB, C and development of specifications for application programs in a patient registration data base.

Programmer Analyst I

940898-R. *Psychiatry*. Requirements: Bachelor's degree in computer science, statistics, mathematics or related scientific

field; knowledge of quantitative and population genetics desired; proficiency in SAS and C. Job located at Boatmen's Bank Building.

Medical Secretary II

940975-R. *Neurological Surgery*. Requirements: High school graduate or equivalent, some college preferred; related experience in medical environment preferred; CRT and dictaphone experience; typing 50 wpm.

Technical Writer/Editor

950089-R. *Surgery*. Requirements: Bachelor's degree, master's degree or Ph.D. preferred; experience in National Institutes of Health grant writing in biomedical sciences. Project will last through January 1995.

Clerk Typist II

950120-R. *Risk Management*. Schedule: Part time, 24 hours per week, 8 a.m.-5 p.m. Mondays, Wednesdays and Fridays. Requirements: High school graduate or equivalent with one year related experience, some college preferred; ability to transcribe with accuracy; knowledge of legal and medical terminology; typing 50 wpm; experience with WordPerfect 5.1.

Medical Secretary II

950149-R. *Metabolism*. Requirements: High school graduate or equivalent, supervisory experience preferred; knowledge of IBM and Lotus/Excel preferred; background in purchasing or accounting helpful; typing 60 wpm.

Medical Secretary II

950207-R. *Neurology*. Requirements: Two years of college; two years related experience preferred; knowledge of WordPerfect; typing 60 wpm. Will have frequent contact with Alzheimer's disease patients and their families.

Data Assistant

950229-R. *Psychiatry*. Schedule: Part-time, 20 hours per week, Mondays through Fridays, flexible hours. Requirements: High school graduate or equivalent, some college preferred; experience with DOS, WordPerfect and data management; experience with research preferred; typing 50 wpm.

Departmental Accounting Assistant

950247-R. *Biochemistry*. Requirements: High school graduate or equivalent; three years related experience; knowledge of general office procedures; typing 40 wpm; experience with Macintosh; knowledge of University procedures and usage of forms highly desired.

University could lose \$1.15 million — from page 1

Ashcroft, put the excess between \$1 and \$5 billion, but amendment sponsor U.S. Rep. Mel Hancock, R-Springfield, said he estimates the excess to be around \$500 million.

To meet the cap, the state legislature would have to cut spending dramatically. Nearly three-quarters of the \$12 billion state budget, however, is exempt from cuts, including spending mandated by the federal government, by the courts, or by the state constitution. That leaves one-quarter of the budget — about \$3 billion — to absorb all the cuts. This section of the budget includes funding for elementary, secondary and higher education, law enforcement, highways and social services. A conservative estimate for a total reduction of \$1 billion would mean most of these areas would be cut by about one-third.

In the area of higher education, the Moody Report predicts cutbacks totaling \$176.6 million, or 28 percent of the amount budgeted for fiscal year 1995. Public universities would be the hardest hit, with some educators predicting faculty and staff lay-offs, tuition increases, elimination of degree programs, reductions in course offerings, even campus closings.

Missouri's private colleges and universities would realize substantial losses in state financial aid for undergraduates. In the 1994-95 academic year, 433 Washington University students from Missouri received \$634,500 in need-based financial aid through the Missouri Student Grant Program. The program matches state and federal funds to help needy Missouri students attend college.

About 82 percent of the need-based aid provided by the grant program (or \$9 million of a total \$11 million) goes to students who attend private universities in Missouri. If Amendment No. 7 passes, St. Louis-area schools like Washington University, St. Louis University, Webster University and Fontbonne College would lose a total of \$4 million in need-based financial aid.

In addition, the state's Higher Education Academic Scholarship Program, or "Bright

Flight" program, could be axed under Amendment No. 7. Bright Flight awards scholarships of \$2,000 a year to students whose college admission test scores rank in the top 3 percent of those taking the test in the state. More than 250 Missouri students at Washington University received about \$500,000 in Bright Flight scholarships this year.

Mo Nixon is a senior political science major from St. Louis County who receives \$3,500 a year from the Missouri Student Grant Program and Bright Flight.

"These state scholarships were a very important factor in my being able to afford Washington University. There is no way I and my family could afford it without this financial aid," Nixon said. "They also keep good students in Missouri. I think the cuts that would occur under this amendment would have a traumatic effect on these scholarships."

"Some of our best students in the state attend Washington University with support from these programs," said Dennis Martin, assistant provost and director of Student Financial Services. "In a time of reductions in student grant assistance, the \$1.15 million Missouri students receive to attend Washington University is a critical factor in the financing available for most of our in-state students. The Missouri Student Grant and Bright Flight programs provide important opportunities to Missourians for studying not only at Washington University, but at any of the accredited colleges and universities in the state."

Hancock supporters say these fears are exaggerated, and maintain that there is plenty of room in the state budget for major cuts without impacting important programs.

Missourians for Higher Education, of which Washington University is a member, in conjunction with other groups that would be impacted by passage of Amendment No. 7, is working with the Committee to Protect Missouri's Future to educate voters about the ballot issue. — Susannah Webb

Q&A

Addressing employee questions concerning the Washington University community

Q: What kind of recycling program is there on campus?

A: Although individual departments had been recycling for years, Washington University established a campus-wide recycling program in 1991 at the request of the student-run Environmental Action Group. The plan includes aluminum, newspaper, cardboard, file stock (office paper) and, on the South Forty, glass and plastic. Recycling containers are located in almost every building on the Hilltop Campus, and bins are stationed throughout the South Forty. Paper and aluminum containers are available through Campus Stores.

It is difficult to gauge the University's potential for recycling, but participation is strong. Last year, the Hilltop Campus recycled 2,821 pounds of aluminum, 50,820 pounds of newspaper, 35,330 pounds of cardboard and 159,940 pounds of file stock. Students on the South Forty last year recycled 9,669 pounds of aluminum, 74,300 pounds of

newspaper, 67,905 pounds of cardboard, 30,890 pounds of filestock, 1,080 pounds of plastic and 45,370 pounds of glass. A glass recycling program on campus would be impractical, primarily because most of the glass on campus consists of laboratory test tubes, which, due to the possibility of contamination, cannot be recycled.

For more information about recycling at Washington University, call 935-5045. — George Burris, director of housing and food service operations

Submit questions about the University, which have broad appeal, to Q&A, c/o Susannah Webb, Campus Box 1070, or p72245sw@wummd.wustl.edu. Questions will be answered by the appropriate administrator. Though employee questions will appear anonymously in the Record, please submit your full name, department and phone number with your typed question. For information, call Webb at 935-6603.