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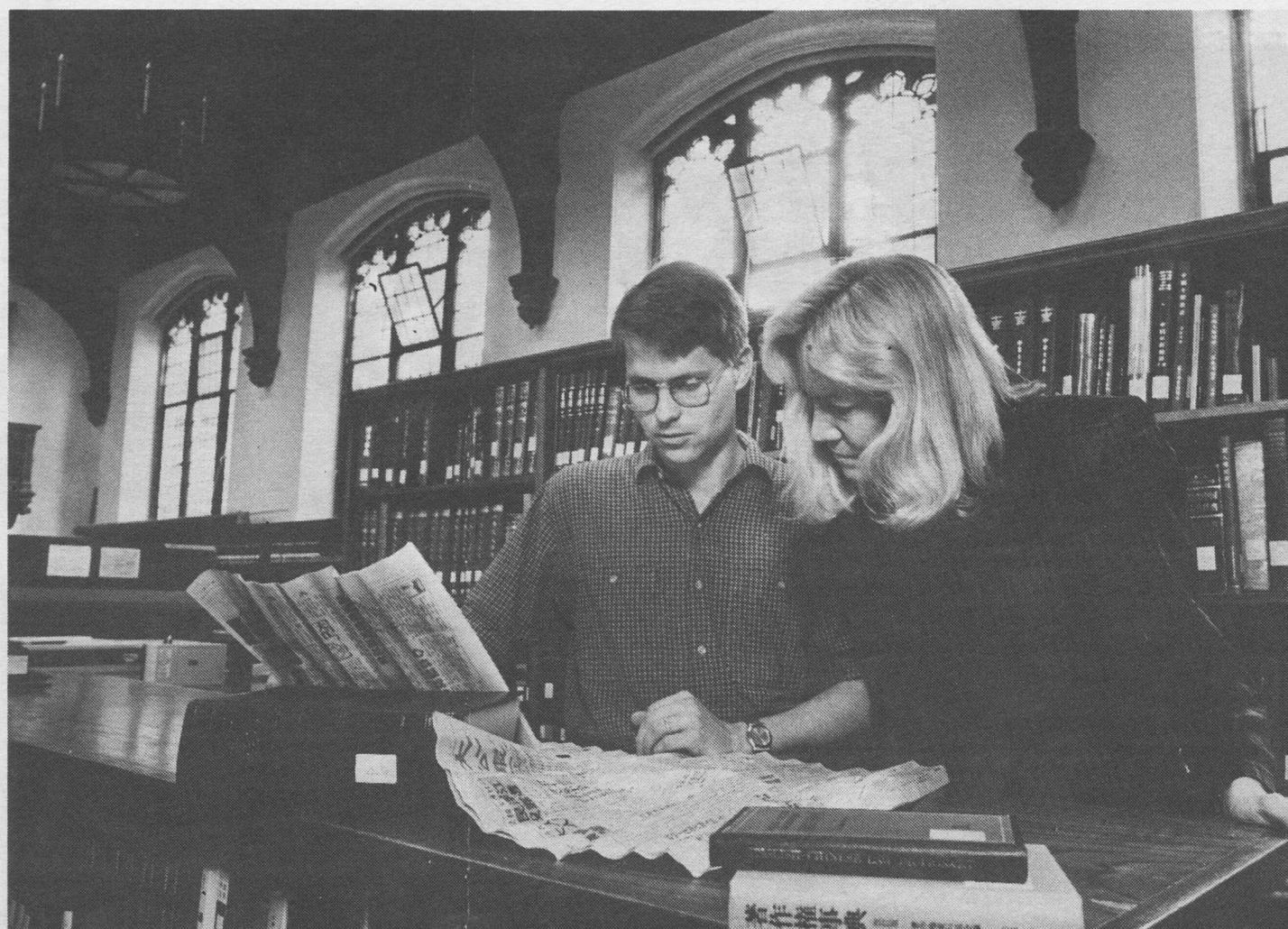
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# RECORD

**Washington**  
WASHINGTON UNIVERSITY IN ST. LOUIS

Vol. 16 No. 29/April 23, 1992



Brad Jones, a second-year law student in the joint degree program in law and East Asian studies, and Frances Foster, J.D., J.S.D., associate professor of law who teaches in the program, read Chinese language papers from Hong Kong in the East Asian library in January Hall. In its final report to the University community, the Committee to Prepare for the 21st Century mentioned the joint degree program as an example of interdisciplinary education that has been highly successful here and encouraged more cross-disciplinary activity at the University. After graduating with his two degrees, Jones plans to join a law firm in Asia, working in intellectual property law.

## 'A University Agenda'

### Committee presents recommendations to meet future challenges

Washington University has made excellent progress in the last five decades, concludes the Committee to Prepare for the 21st Century in its final report to the University community. For the University's future success, the committee presents a number of recommendations intended to make Washington University an even more dynamic institution for the 21st century.

The committee's recommendations are included in the report, "A University Agenda for the 21st Century," which was released by Provost Edward S. Macias on April 13.

"We can't see into the future and this is not a futuristic document," says Macias, who chaired the committee. "We don't know what the future holds, but we want to be prepared for whatever the challenges of the future are. This is not a strategic plan. It's a series of suggested actions that could lead us to be a much stronger University. It's planning with a small 'p.' It's people thinking about the future."

Not a wish list for the future, the report focuses almost exclusively on areas where improvements are both desirable and feasible, Macias says. The report looks at the challenges facing the University as a whole, suggests directions and recommends "next steps." Individual programs, departments and fields of study were not the focus of the study, he says.

#### Nine major themes

After outlining nine major themes and areas for action, the document provides specific recommendations that were

identified as essential to the University in meeting the challenges of the future. The nine areas are:

- *The University Community*, which focuses on creating effective communication strategies and building a sense of community among all members of Washington University, including faculty, staff and students.
- *Undergraduate Life and Study*, which focuses on providing undergraduates learning experiences of the highest quality both in and out of the classroom, and which gives special attention to the experience of the first-year student.
- *Graduate Study*, with the aim of improving and expanding Ph.D. education and the preparation of the next generation of scholars, teachers and researchers.
- *Faculty*, with a goal of continued success in recruiting and retaining high quality and diverse faculty members, including new ways of thinking about faculty appointments, tenure and career paths.
- *Coordination and Cooperation*, wherein a culture of greater collaboration will be encouraged among separate University units, including the ability of graduate and undergraduate students to take courses in any division of the University, while preserving the strengths of the current reserve system.
- *Cross-Disciplinary Activity*, which recognizes that although separate disciplines are the foundation of a strong university, significant research and teaching initiatives develop when individuals step across the boundaries of traditional disciplines. Drawing on the experiences of already successful interdisciplinary research and teaching activities on campus, the report recommends further collaborative efforts in composite areas like biomedical engineering, cognitive science, environmental studies, materials

science, performance studies and visual arts, and business economics. These collaborative activities might include joint appointments for faculty, widespread information on faculty research interests, and academic clusters in the following areas: the arts; the sciences, medicine and engineering; and the social sciences and the professional schools.

- *International Activities*, which recognizes the increasingly interdependent world and calls for the preparation of students for work beyond the boundaries of the United States.
- *St. Louis*, which calls for the continuation of the University's role as a good neighbor and a constructive, contributing member of the St. Louis community.
- *Planning*, which emphasizes the importance of long-term planning as a guide in establishing priorities, making wise choices and taking advantage of opportunities.

#### The Process

The report, written as an internal document, reflects the thoughts and work of a broadly based committee of students, faculty and administrators. Beyond the 22-member committee, additional members of the faculty also served on eight subcommittees, and many more members of the Washington University community carefully read a working draft of the report and submitted their reactions and thoughts to the committee.

The committee met for the first time in December 1989. In subsequent meetings, the committee identified broad areas of interest critical to the future of the University. In the fall of 1990, eight subcommittees were formed to discuss different areas of concern. Many of these subcommittees were expanded to include other members of faculty and administration

*Continued on p. 2*

## Powwow honors American Indian traditions, peoples

Native American traditions will be honored through storytelling, dancing and songs during a powwow on Saturday, April 25, in Francis Gymnasium.

The event, which is sponsored by the Center for American Indian Studies at the George Warren Brown School of Social Work, is free and open to the public.

The ceremonial program will feature events continuously from 1 to 5 p.m. and from 6 to 10 p.m. Food and American Indian items will be on sale. A tribal dress contest also is scheduled.

American Indians from throughout the Midwest will participate in the powwow, including members of the Comanche and Oneida tribes. Some of the program's highlights include a friendship dance, where performers form a circle to symbolize the equality of all people, and the gourd dance, which is a warrior dance performed by descendants of the Kiowa and Comanche tribes to preserve the traditions of the warrior society.

According to Dana Klar, J.D., the center's director, the powwow offers the community an opportunity to learn about sacred ceremonial traditions of American Indian culture. In the quincentennial year of the encounter between Christopher Columbus and American Indians, this powwow is dedicated to the surviving American Indian traditions and peoples, says Klar.

At least 40 American Indian tribes are represented in the St. Louis metropolitan area.

For more information about the event, call the Center for American Indian Studies at 935-4510.

## Social historian discusses life cycle in Renaissance Florence

Gene Brucker, a leading American authority on the social history of medieval and Renaissance Florence, will give a lecture titled "From Birth to Death: The Life Cycle in Renaissance Florence" on Monday, April 27. The talk, which will be held at 1:30 p.m. in Room 200 Steinberg Hall, is part of the University's Assembly Series. The event is free and open to the public.

Brucker, professor emeritus in the Department of History at the University of California, Berkeley, is the author of several books, including *Giovanni and Lusanna: Love and Marriage in Renaissance Florence*, published in 1986; *People and the Communities in the Western World*, published in 1979; and *The Civic World of Early Renaissance Florence*, published in 1977.

In 1983 Brucker was acting director of the Harvard University Center for Renaissance Studies, Villa I Tatti, in Florence. He was president of the Renaissance Society of America in 1989.

After receiving his doctorate from Princeton University, Brucker began teaching at the University of California, Berkeley, in 1954, and was named Shepard Professor of History in 1980. A Rhodes scholar at Oxford University from 1948 to 1950, he also has been a Guggenheim fellow, a Fulbright fellow in Italy and a fellow at the Institute for Advanced Studies in Princeton, N.J.

The lecture is co-sponsored by the Assembly Series and Departments of Art History and Archaeology, Germanic Languages and Literatures, History, and Romance Languages and Literatures. For more information about the lecture, call 935-4620.

#### Inside: **MEDICAL RECORD**

- **Growth hormone no 'magic bullet' for building muscle. Page 3**
- **Researchers turn to fish to learn how the human body fights disease. Page 4**
- **Scientists strive for global diagnostic standard. Page 5**



## Postseason play is a realistic goal for baseball Bears

As the 1992 regular season winds down, Washington University's baseball squad remains in contention for a berth in the NCAA Division III national tournament. Six weeks into the season, the Bears have compiled a 19-11-1 overall record. Against non-NCAA Division I competition, Washington U. is 19-8-1.

With 10 regular season games remaining, postseason play is a challenging, yet realistic goal for the Bears. An improved defense and consistent pitching have been the keys to what could be Washington's first NCAA baseball tournament bid since 1983.

"We played a strong first-half schedule and I'm hoping that will make us a more seasoned team down the stretch," says third-year coach Kevin Benzing. "If we start hitting like we did earlier this season, I think we can make a serious run."

Last month at the Fourth Annual University Athletic Association Tournament in Cocoa, Fla., the Bears turned in their finest conference performance, finishing with a 3-3 record. The Bears came within a couple runs, however, of claiming a share of first place. If the Red and Green could have defeated eventual champion Johns Hopkins in their final tournament game, a championship was guaranteed. Instead, the favored Blue Jays notched a 6-4 victory and the 1992 UAA title.

The Bears' strong showing did not go unnoticed as four Washington players earned all-UAA kudos. Three of the four honorees — junior short-stop John Tanner, freshman outfielder Bob Wallace, and sophomore pitcher Jason French — garnered first-team honors. Second-team recognition went to senior catcher Bryan Marshall.

Through 31 games, Wallace and designated hitter Kyle Steiner lead the Bears offensively. Wallace is batting .387 and needs just six more base hits to become the all-time hit leader for a freshman in a single season. Steiner is hitting .327 and leads the Bears in runs batted in (29) and home runs (4).

On the mound, sophomore righty Kirt Ervin has posted a 7-2 record in nine starts and leads the Bears with 54 strikeouts. Sophomore Derek Beaman is the team ERA leader with a 3.37 mark.

## 'A University Agenda' — continued from p. 1

that were not members of the main committee. The subcommittees issued reports, which are appended to the final report. The key to the report, Macias says, lies in the fact that Washington University is already a strong and dynamic institution.

"It is because of our strengths that we feel the time is right to build an even more exciting University for the 21st century," he says. "In preparing this report, the critical importance of thoughtful planning for the future success of our University has become clear. Planning must guide us in establishing priorities, making wise choices and taking advantage of opportunities. We hope this report will serve as an important step in the process. Not everything suggested in the report can begin immediately. Many suggestions will require coordination by appropriate bodies; some can be implemented without waiting; others might be considered for the future. This is, after all, a report for the 21st century. We are encouraging the University community to think in new ways."

2



**A comedic feast:** Performing arts students will present "The Art of Dining," a play all about food, at 8 p.m. April 23-25 and at 2 and 7 p.m. April 26. Cast members are (back row, l. to r.) Meredith Welsh, Lauren Golden, Melanie Dreyer, Chris Mathews, David Baecker; (front row) Adena Brumer, Nicki Sarich, Winston Bull and Kelly Hobbs. The event will be staged in the Mallinckrodt Center Drama Studio, Room 208. For ticket information, call 935-6543.

## Career expert shares secrets to successful job hunt

In an effort to help Washington University seniors feel positive about their job search, Howard Figler, a nationally known career consultant, will speak to the students on Monday, April 27, about finding a job during a recession.

Figler's talk, titled "The Secrets to a Successful Job Search," is scheduled for 1 p.m. in Graham Chapel. During his talk, Figler will discuss how to conduct a successful job search campaign. He also will talk about alternatives to traditional jobs for graduates. The event, which is open to the University community, is sponsored by the Career Center in cooperation with the senior class.

"The purpose of the presentation is to help graduating seniors regain a sense of hope about finding a job in a difficult market," says Alfreda Brown, director of the Career Center. "Some of our seniors have secured jobs, others have received rejection letters from employers and graduate schools, while others have given up on finding a job before even trying to conduct a search. The program is designed to help motivate and encourage our students to feel positive about life after Washington University."

Figler, of Sacramento, Calif., is the author of the 1988 best seller *The Complete Job Search Handbook and Liberal Education and Careers Today*,

which he wrote in 1989. A licensed psychologist, he is a career consultant for businesses, professional associations, non-profit organizations and universities. He was the director of career counseling at the University of Texas in Austin and at Dickinson College in Carlisle, Pa., for a combined period of 20 years.

As part of his visit, Figler also will speak to local alumni and University staff at 5 p.m. April 27 in the May Auditorium, Simon Hall. This session also is open to the University community. For more information on Figler's visit, call the Career Center at 935-5930.

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Copies of the report are available from the Provost's Office, 229 N. Brookings.

### Committee members

The following are members of the Committee to Prepare for the 21st Century: Edward S. Macias, Provost and Chair of the Committee; James W. Davis, Professor of Political Science, Vice Chair and Executive Secretary of the Committee; Kathleen F. Brickey, George Alexander Madill Professor of Law; Harvey R. Colten, Harriet B. Spoehrer Professor of Pediatrics and Head of the Department of Pediatrics;

Roy Curtiss III, George William and Irene Koechig Freiberg Professor of Biology and Chair of the Department of Biology; Joe Deal, Dean, School of Fine Arts; William H. Gass, David May Distinguished University Professor in the Humanities; James R. Harris, Associate Professor of Architecture and Associate Dean, School of Architecture;

Harry E. Kisker, Vice Provost and Dean, Student Affairs; Stuart A. Kornfeld, Professor of Medicine; Ronald M. Levin, Professor of Law and Associ-

ate Dean, School of Law; Jonathan A. Locker, Engineering, Class of 1992; Paul Michael Lützel, Professor of German and Comparative Literature and Director of the European Studies Program;

James E. McLeod, Director of African and Afro-American Studies and Adjunct Associate Professor of Germanic Languages and Literatures; Martha N. Ozawa, Bettie Bofinger Brown Professor of Social Policy; Teresa A. Rittenhouse, Arts and Sciences, Graduate student in English; Robert A. Skinner, Arts and Sciences, Class of 1991;

Barry E. Spielman, Professor and Chair of the Department of Electrical Engineering; Emil R. Unanue, Mallinckrodt Professor of Pathology and Head of the Department of Pathology; Robert L. Virgil, Dean, John M. Olin School of Business; Ilene J. White, Arts and Sciences, Class of 1991; and Gerhild S. Williams, Professor and Chair of the Department of Germanic Languages and Literatures and Associate Provost.



# MEDICAL RECORD

## Medical school dean elected AAAS fellow

William A. Peck, M.D., vice chancellor for medical affairs and dean of the School of Medicine, and president of the Washington University Medical Center, has been elected to the rank of fellow by the American Association for the Advancement of Science (AAAS).

A fellow of the association is defined as a "member whose efforts on behalf of the advancement of science or its applications are scientifically or socially distinguished."

The citation that accompanied Peck's nomination read: "For distinguished research in bone and mineral metabolism and for leadership in developing an internationally acclaimed center of clinical investigation at Washington University."

Peck is an internationally recognized expert in the study and treatment



William A. Peck

of osteoporosis, a progressive bone disease that is believed to affect more than 20 million Americans—usually women—who suffer bone loss and who may have severe skeletal and

health problems. His contributions to academic medicine include clinical patient care, research, teaching and administration. Peck is the author of more than 140 articles, abstracts and other publications, particularly regarding bone metabolism and osteoporosis.

Peck serves on the board of trustees of the National Osteoporosis Foundation and was president of the organization from 1985-91. He serves on the National Arthritis, Musculoskeletal and Skin Diseases Advisory Council of the National Institutes of Health and is on the advisory panel for assessment of Policy Issues and the Prevention and Treatment of Osteoporosis with the Office of Technology Assessment.

He is on the editorial boards of several scientific journals, and is a member of numerous academic and scientific societies, including the American Society for Clinical Investigation, the Association of American Physicians, and the American Society for Bone and Mineral Research. He was president of the latter in 1983.

Named to his current position in 1989, Peck is the first person to serve as both vice chancellor for medical affairs and dean of the School of Medicine.

## Volunteers needed for diabetes study

Researchers at the School of Medicine are seeking participants for several diabetes studies.

Persons over age 30 who have non-insulin dependent diabetes and are currently being treated with either diet or oral medications are needed for investigations of experimental oral drugs. Three oral medications will be tested over three months to two years. Additional restrictions will apply to each study. Laboratory tests, examinations and medications will be provided.

Persons with either Type I or Type II diabetes who have open foot ulcers are needed for a study of new treatments for the sores. Screening and treatments will be provided at no charge to patients.

Studies are being conducted by Janet B. McGill, M.D., instructor in medicine and pediatrics, who also directs the Diabetes and Hypertension Study Group. For more information, call 362-8681.



Jil Campbell, clinical technician, injects study participant Duane Bibko, 65, with a dose of human growth hormone as Kevin Yarasheski, Ph.D., looks on.

## 'Pump you up'

### Growth hormone no 'magic bullet' for building muscle

Professional athletes are paid to win. Some, however, take their fervor to extremes by using drugs to enhance performance. The most common are anabolic steroids, which are banned in professional, amateur and college and high school athletics. Routine screening of athletes for steroid use has led some to seek a substitute for steroids — one that would be untraceable in routine tests. That search has led many to human growth hormone.

Human growth hormone is produced in our pituitary glands. We produce the greatest quantities during adolescence, and as the name suggests, the hormone is responsible for spurring growth in our muscles, bone and connective tissue. Those athletes who use it believe that human growth hormone will give their muscles a kind of "jump start" and add to the effectiveness of their regular workout. That's the idea anyway, but it doesn't work, according to a study published in the March 1992 issue of the *American Journal of Physiology (Endocrinology and Metabolism)*.

The study, conducted by Kevin Yarasheski, Ph.D., a research instructor of medicine at the School of Medicine, concludes that growth hormone does not help muscles grow any faster or operate any more efficiently than does exercise alone.

His study is the first to examine the combined effect of growth hormone and resistance exercise in a population of normal, healthy young men. He says the reason that such a study hasn't been done before is the relative youth of synthetic growth hormone. For a long time human growth hormone could be obtained only from human cadavers. Its use was limited strictly to short-stature children. In the last decade, however, recombinant DNA techniques have led to wider availability of growth hormone and given researchers the chance to study other potential uses.

Yarasheski's study looked at 16 men between the ages of 21 and 34. The men did 12 weeks of heavy resistance training on Nautilus weight-lifting machines. The participants worked on

all of their major muscle groups, alternating daily between upper- and lower-body workouts. The participants, says Yarasheski, "started lifting weights at about 75 percent of their max and worked up to about 85 to 90 percent of their maximum strength. This kind of high-intensity, low-repetition workout has been shown to improve muscle strength and enhance muscle growth."

When the workouts were over and the final measurements were taken, Yarasheski discovered no significant differences between the men who had only lifted weights and those who had lifted weights and taken growth hormone. Their muscles grew at about the same rate. Their strength increased a similar percentage. The only discernible difference between the two groups was in the measurement of fat-free mass. The people who took growth hormone had less body fat, but they didn't get bigger muscles. Some of their increase in fat-free mass was caused by fluid retention, according to Yarasheski.

These were unexpected results. "I was surprised that growth hormone had so little impact on the muscles of the men studied," Yarasheski says. "I believed a lot of the preconceived notions about growth hormone, that it would enhance muscle growth tremendously," but it did not. He theorizes a potential reason for that, saying, "Muscles can grow at an increased rate, but perhaps there is a limit. When you give a person resistance exercise, you promote muscle growth, but if you add another potential muscle growth enhancer like growth hormone, you may not get any added growth."

Yarasheski says growth hormone is probably not the "magic bullet" that will improve quality of life by making people stronger and healthier. It does reduce body fat and increase fat-free mass, but it seems to have no effect on muscle function.

In addition, there are side effects. The most common appears to be a wrist problem known as carpal tunnel compression. It is caused by pressure

on the nerve in the wrist, and its victims suffer from numbness or tingling in the fingers of the affected hand. Yarasheski reported a couple of cases of carpal tunnel compression in his study of young men. He's had several more cases in the ongoing study of older men and women.

Another side effect related to fluid retention is high blood pressure, thus growth hormone can cause problems for those who suffer from hypertension. The hormone also makes test subjects slightly glucose intolerant, but Yarasheski says that condition ends when the injections stop. Some evidence also shows that people in the early stages of cancer could see more rapid tumor growth if they get growth hormone. In particular, says Vance, too much growth hormone can be related to colon polyps or colon and stomach cancer.

Neither Yarasheski nor growth hormone researcher Mary Lee Vance, M.D., of the University of Virginia Medical Center in Charlottesville, believe the hormone is related to the brain cancer that former athlete Lyle Alzado has developed.

The retired National Football League defensive lineman says he took growth hormone after switching from steroids, and he blames the hormone for his inoperable brain cancer. Yarasheski says that's highly unlikely. He cites the more than 10,000 children who have received synthetic growth hormone and notes that "No child has ever developed the type of brain cancer that Lyle Alzado has." In addition, says Yarasheski, it is likely that while Alzado thought he was using growth hormone, he probably did not get the real thing. Researchers who have attempted to acquire growth hormone on the black market have discovered that in most gyms, dealers are selling "water or sugar water, or steroids," according to Yarasheski. Vance believes that in the former All-Pro lineman's case, "Lyle Alzado got lymphoma ... period."

According to Yarasheski's findings, even if Alzado had used actual growth



# MEDICAL RECORD

## Students receive Olin fellowships

The School of Medicine has selected 17 students as Spencer T. and Ann W. Olin Medical Scientist Fellows for 1991. Twelve of the recipients are in the six-year Medical Scientist Training Program (MSTP), a program that trains students simultaneously as physicians and researchers, granting a combined M.D./Ph.D. degree; the other five are pursuing doctoral degrees.

The recipients, who were selected for superior achievement in biomedical research, are: James F. Amatruda, a 1986 graduate of Harvard University; Robert Ari Berkowitz, a 1984 graduate of the University of Chicago; Sanjay A. Desai, a 1985 graduate of Duke University; Michael A. Farrar, a 1987 graduate of the University of Wisconsin at Madison; Robin D. Hanson, a graduate of Johns Hopkins University; Stanley L. Hazen, a 1985 graduate of Washington University; Andrew D. Hershey, a 1985 graduate of the University of Iowa; Gurjit Khurana-Hershey, a 1985 graduate of the University of Iowa; Robert C. Piper, a 1985 graduate of Reed College; Carlos Rosales, a 1981 graduate of the National Autonomous University of Mexico; David A. Rudnick, a graduate of the University of Illinois; Bradley L. Schlaggar, a 1986 graduate of Brown University; David K. Simon, a graduate of Johns Hopkins University; Viviana Derechin Van Deerlin, a 1986 graduate of the University of Chicago; James A. Waddle, a 1986 graduate of the University of Nebraska; Peter Westervelt, a 1985 graduate of Colby College; and Andrew A. Zupan, a 1984 graduate of Washington University.

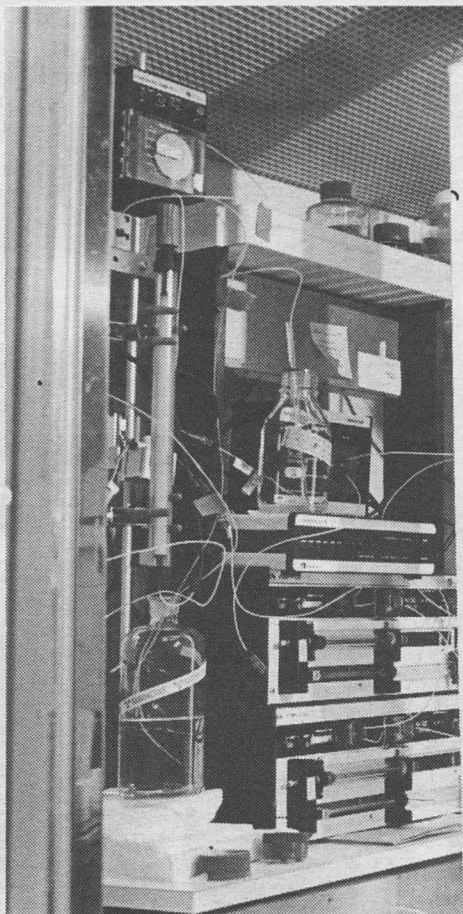
The fellowships were made possible by a \$30 million gift from the Spencer T. and Ann W. Olin Foundation. They were established in an effort to help fill the continuing shortage of physicians who pursue careers in biomedical research. The awards are primarily for MSTP students, but also are awarded to selected students pursuing doctoral degrees in biomedical science.

The award provides full tuition and an annual stipend of \$12,600. Since the program began in 1987, 44 students have been selected Olin Fellows. The current group brings the total to 61.

## Gordon to receive achievement award

Jeffrey I. Gordon, M.D., alumni professor and head of the Department of Molecular Biology and Pharmacology, will receive the American Gastroenterological Association's Distinguished Achievement Award, its highest honor for an investigator.

Gordon's laboratory has used transgenic mice to examine the mechanisms that allow the intestine to acquire different functions in its various parts, and how gut epithelial cells differentiate from stem cell precursors. Gordon and his colleagues also have employed genetic, biochemical and organic chemical tools to examine an enzyme (N-myristoyltransferase) that attaches myristic acid (a rare fatty acid) to proteins that are important in regulating the growth of cells, the viability of fungi that cause a variety of infectious diseases, and the assembly of certain viruses. These studies have allowed them to develop a new group of compounds that inhibit replication of the AIDS virus in human white blood cells in the laboratory. These compounds also may be useful for treating other infectious agents and may affect other pathologic conditions, such as cancer.



Paul Levine, Ph.D., professor of genetics, and Jacqueline E. Snider, medical research technician, hope to create a protective vaccine by inserting a disabled bacterial protein into a compound that provokes an immune response.



## Fishing for a cure

### Scientists study how stress triggers lethal disease in salmon

Scientists studying how stress sabotages the human body's disease-fighting capability are turning to an unlikely source - rainbow trout and salmon - for guidance. No mere fish story, the research could save countless fish, stem the loss of millions of dollars each year for aquaculture, and possibly tell scientists why people under stress are more likely to become ill.

Researchers at the School of Medicine have been monitoring a deadly kidney disease caused by *Renibacterium salmoninarum*, a bacterium that kills countless thousands of salmon each year. Recently, Paul Levine, Ph.D., professor of genetics at the medical school, reported progress in identifying one of the bacterial toxins that may be responsible for causing the illness. The results were presented late last year at the 32nd Western Fish Disease Conference held in Newport, Ore.

Levine and Jacqueline E. Snider, a medical research technician, hope to create a protective vaccine by inserting a disabled bacterial protein into a compound that provokes an immune response. Such a vaccine could possibly be administered by mixing it with a fish's normal food, Levine says. The vaccine would be welcome news for salmon farmers from Seattle to Vancouver to Oslo because currently there is no cure for the disease.

And there might be something in it for humans as well. These studies also could provide insight into the mechanisms that allow various human pathogens to lie dormant for years before making their assault. Such a payoff - if it ever comes - is many years away. But the work could be of more immediate benefit if it helps curtail the spread of the bacterial disease in the salmon population, an urgent and practical goal, Levine believes.

Help in the form of a vaccine couldn't come at a more opportune time. Already a major economic problem for fish farms and hatcheries in the United States, Canada, Norway and Chile, *R. salmoninarum* is responsible for the loss of millions of dollars worth of Atlantic and Pacific salmon, rainbow and brown trout yearly.

Scientists hope to slow the current rate of destruction, and in the process learn why fish carrying the bacteria can

appear perfectly healthy before suddenly dying. A popular theory suggests that salmon harbor *R. salmoninarum* and it is only when the fish are stressed that the bacterial toxins ravage the fish, ultimately killing them. "We do not know what triggers these events," Levine says, "but stress is clearly important."

Knowing that crowding, temperature swings, transport and predators are the main causes of stress in fish doesn't make the job of stopping the bacteria any easier. And it certainly doesn't help to know that fish are very easily stressed. What would help most is a better knowledge of how the salmon immune system works, Levine says. "Our main problem is that we don't know as much about the fish immune system as we ought to," he adds.

This is where Levine comes in. Having spent much of his career studying the complement proteins of the human immune system, Levine switched to studying fish about two years ago. In general, he says, the fish immune system is similar to that of humans - T-cells, B-cells and a repertoire of blood cells. The difference is in the detail. For example, the site where immune system proteins are manufactured is different, complicating the application of much of the knowledge gleaned from human immunology, Levine explains.

Scientists do know, however, that once *R. salmoninarum* enters a fish, it targets a group of white blood cells known as macrophages. *R. salmoninarum* resides inside macrophages - like the organisms that cause tuberculosis and leprosy - and somehow restricts the macrophages' ability to eliminate foreign objects. Researchers don't know whether this preemptive strike on macrophages is the master stroke that limits the fish's ability to mount an immune response. Levine hopes there's some way to help the macrophages overcome this assault by bringing other components of the immune system to the rescue.

Levine is pinning his hopes on a chemical compound that can shuttle a disabled protein toxin from *R. salmoninarum* inside the fish, creating a vaccine that primes the immune system to search for and destroy the invading bacteria. The crucial chemical carrier - already known to be a potent stimulator of the immune response - comes from

the South American tree, *Quillaja saponaria*. The Food and Drug Administration recently approved the use of the extract, QS-21, in a feline leukemia virus vaccine, and the compound also will see its first human trials in an experimental vaccine to treat melanoma.

Levine hopes that an oral vaccine may provide the boost needed to stimulate the immune system to produce killer T-cells, which might help fight infection. The fish already produce antibodies against the bacterium's antigens, but they do not appear to be protective.

Selecting the right bacterial protein to use in the vaccine has been another problem. So far one protein, p 57, has received the bulk of attention in Levine's lab, and he believes it's a good candidate for use in a vaccine.

The clock is ticking. Research during the last few years has shown that p 57 is passed "vertically" to the next generation of fish via infected eggs. "This could potentially lead to global distribution of the disease," Levine notes. There has been debate among scientists as to whether there is such a thing as a "negative fish" - a fish that may show no evidence of bacterial antigens in kidney tissue, but has the antigens present in its eggs.

In Levine's lab, Snider has found evidence that p 57 is present in the eggs of fish carrying the disease. Although concerned by the possibility that there might not be a negative fish, Levine thinks the question must be explored very carefully. "We're looking at a lot of eggs from a lot of fish," he adds.

Having made the jump from studying the human immune system to examining the stress response in fish, has allowed Levine to set out into the "field" - from British Columbia to the trout hatchery 90 miles west of St. Louis. He compares the task of collecting trout to a trip to the local pet store. "We fill our plastic bags with water, put oxygen in the water, add the fish, tie the bag with a rubber band and stick it in a cooler. It's just like buying a goldfish," he notes.

Although there is only a small number of researchers devoted to solving the devastating problem of fish diseases, Levine is optimistic that, with help from industry, a vaccine will soon be developed.



## Raichle garners awards for breakthrough brain research

Marcus E. Raichle, M.D., a neurologist at the School of Medicine, has received two awards for his breakthrough research on the function of the human brain.

Raichle was presented the 1992 Decade of the Brain Medal by the American Association of Neurological Surgeons on April 13 at the group's annual meeting in San Francisco. The medal commemorates the "Decade of the Brain 1990-2000," enacted by Congress to enhance public awareness of the benefits of brain research. The medal is awarded annually to a distinguished neuroscientist in recognition of notable contributions to this research.

He also will receive the Silvio O. Conte Decade of the Brain Award from the National Foundation for Brain Research at the organization's third annual Decade of the Brain Symposium on May 19 at the National Press Club in Washington, D.C. The foundation presents the award annually to a person who has demonstrated leadership and excellence in the advancement of the brain sciences. The award commemorates the late Silvio O. Conte, a congressman from Massachusetts whose efforts resulted in President Bush naming 1990-2000 as the "Decade of the Brain."

Raichle, professor of neurology and radiology, heads a team of scientists who track and record the

brain's function using positron emission tomography (PET). Developed at Washington University during the 1970s, PET allows researchers to look safely at the living human brain and to track and record its functions. Analyzing data from PET images, Raichle and his colleagues are mapping with great precision the functional organization of the brain. For example, groundbreaking investigations conducted at the School of Medicine have pinpointed the abnormality in brain activity that occurs with panic attack and have revealed the location in the brain of that anxiety. Other studies using PET are revealing important information about language processing, thought and attention. Researchers also are using PET to study depression, schizophrenia, Alzheimer's disease, learning disabilities and memory.

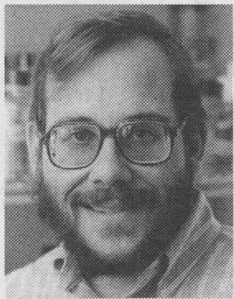
Prior to joining the School of Medicine in 1971, Raichle was at Cornell Medical Center and the University of Texas Medical School in San Antonio.

He is a member of more than 15 organizations, including the American Academy of Neurology, the American Association for the Advancement of Science, American Heart Association (Stroke Council), International Society of Cerebral Blood Flow and Metabolism (president 1991-93), Society for Neuroscience and Association for Research in Nervous and Mental Disease.

## Sanes elected fellow of science association

Joshua R. Sanes, Ph.D., professor of anatomy and neurobiology at the School of Medicine, has been elected to the rank of fellow by the American Association for the Advancement of Science (AAAS).

A fellow of the association is defined as a "member whose efforts on



Joshua R. Sanes

synapse formation."

Sanes' research is directed toward learning how synapses form in the

behalf of the advancement of science or its applications are scientifically or socially distinguished." The citation for Sanes' election as fellow reads: "For many insights into the mechanisms of

vertebrate neuromuscular system. His research addresses an issue that has become increasingly important in neurobiology: What molecules do neurons use to recognize each other, leading to the highly complex patterns of synaptic interconnections that form during development? In addition, Sanes has studied the genealogy of neural cells, seeking to learn how environmental and inherited influences interact to determine the numbers and types of neurons that are generated in the brain.

Eventually, Sanes hopes to use the information his studies produce to help form hypotheses about when, where and how cells form and become linked to each other.

Sanes joined Washington University in 1980 as an assistant professor of physiology and biophysics, and was named professor of anatomy and neurobiology in 1988.

## Volunteers needed for Parkinson's study

Researchers at the School of Medicine need volunteers to participate in clinical trials for an investigational drug used for Parkinson's Disease.

The experimental drug, Lazabemide, will be studied for its safety and effect on symptoms of Parkinson's Disease, a progressive neurological disease characterized by slowness and tremors. Lazabemide, being developed by Hoffman-La Roche of Nutley, N.J., may be of potential value in slowing the progression of the disease.

The School of Medicine is one of 18 medical centers and hospitals across the United States and Canada that will soon begin controlled clinical trials of Lazabemide. Overall, 300 subjects will participate. Director of the local study is Joel S. Perlmutter, M.D., associate professor of neurology. Perlmutter expects to enroll about 17 subjects.

"We are fortunate to be able to offer patients with mild symptoms of Parkinson's disease the opportunity to participate in this research. This study is

an initial step to determine whether Lazabemide can slow the progression of Parkinson's disease," Perlmutter said.

Subjects must be newly diagnosed with Parkinson's and have very mild symptoms. Participants in the double-blind study will be randomly assigned to take either a placebo or Lazabemide but have an 80 percent chance of receiving the experimental medication. They will be treated for up to 13 months.

Parkinson's disease is a progressively disabling illness caused by damage to nerve cells in a part of the brain called the substantia nigra. Drugs now used for Parkinson's patients treat symptoms, such as slow movement, tremors, stooped posture and unsteady balance. But no currently approved medications slow or stop progression of the underlying damage.

There is no cost to participate in the study. Persons in the St. Louis area interested in participating may call Lori McGee-Minnich at 314-362-7148.



Norman Sartorius, M.D., Ph.D., director of the WHO division of mental health, is in St. Louis to work with the medical school's Department of Psychiatry.

### 'A diagnostic language'

## Scientists strive for global standards

Researchers at the medical school have teamed with the World Health Organization (WHO) in a global effort to standardize the criteria doctors use to diagnose various mental disorders.

The scientists are trying to better define what differentiates one illness from another and develop universally accepted criteria upon which doctors decide how to diagnose various diseases.

Norman Sartorius, M.D., Ph.D., director of the WHO division of mental health, is visiting St. Louis and working with the School of Medicine's Department of Psychiatry. Sartorius, who has had a long relationship with the medical school, says his visit here will strengthen what he considers an already solid and productive working relationship.

"I'm talking to several people and trying to understand what they're doing," says Sartorius, who adds he has been impressed with the work he has observed. "What I have seen confirms the excellent impressions I have been about this university for a long time."

While here, Sartorius will work closely with epidemiologist Linda B. Cottler, Ph.D., assistant professor of psychiatry, and her team of researchers which is working on standardizing the definitions of substance abuse.

"What constitutes a particular disease in the United States might not quite fit with the criteria somewhere else," says Cottler. "Our job is to standardize those criteria for global definitions of drug abuse."

Variations in criteria can divide researchers as deeply as language and ethnic differences divide people around the world. "It is important," says Sartorius, that researchers and doctors "can understand what each other are saying and what goes on in different places." If a researcher in one part of the world develops a successful treatment for a given disease, it does little good to patients elsewhere "if doctors don't agree on the definition of the disease," he says.

Cottler agrees, and adds, "If researchers are to share their work, they need to be speaking the same diagnostic language." That effort, if successful, would set objective standards for diagnoses which in the past would have been left to the judgment of individual researchers. In addition, it would assist in the development of instruments and systems which can be used to quantify the criteria. Sartorius says if the effort succeeds, and some kind of standardization is achieved, both patients and scientists will be better served.

## Diabetes Bike-A-Thon set for May 9

For the second consecutive year, the School of Medicine is organizing a team of cyclists to ride in the 20th annual American Diabetes Association (ADA) Bike-A-Thon Saturday, May 9.

Between 30 and 40 School of Medicine students and employees took part last year and raised \$7,500 for ADA-sponsored diabetes research. Organizers this year say they hope to double the number of participants and exceed the amount of money raised.

Persons with all levels of cycling experience are encouraged to take part. Faculty, students and staff on the Hilltop Campus also are invited to participate.

Those interested in riding with the team should meet at the Grafton, Ill., commuter parking lot between 8:30 and 9:30 a.m., the day of the event. The 21-mile course winds

along the Great River Road, but cyclists are not confined to the course nor are they required to complete the course. Others who want to ride on their own, on behalf of Washington University, can do so on any of the other six routes. Permutt has brochures with route information and sponsor forms.

Participants are expected to either make a small donation to the ADA or get pledges per mile ridden. Jerseys provided by Hoechst Pharmaceuticals and emblazoned with Team Washington University will be awarded to participants raising a minimum of \$50 in pledges.

ADA volunteers will provide food, refreshments and repairs along the route. Sponsor forms are necessary and can be obtained by calling Alan Permutt, M.D., at 362-8680.



# NOTABLES

**Lorrie Ackerman**, a graduate student in the Department of Engineering and Policy, had her article titled "Fuel to Burn" published as the lead story in the St. Louis Post-Dispatch's Everyday section. The article, written as part of an independent study in technical journalism, describes the work of department faculty members **Eugene Shultz**, Ph.D., professor, and **Wayne Bragg**, Ph.D., affiliate professor. They established the roots of the buffalo gourd, *cucurbita foetidissima*, as a valuable cooking fuel in arid, deforested regions of the world.

**Wendy Auslander**, Ph.D., assistant professor of social work, has received a \$25,000 grant titled "Modifying Dietary Patterns by Empowering Black Women." The grant was awarded by the National Institute of Diabetes Digestive and Kidney Diseases of the National Institutes of Health. The study will determine the most effective way to modify the dietary patterns of African-American women at risk for non-insulin dependent diabetes. Auslander said one in four African-American women over the age of 55 has diabetes. The study will be conducted in collaboration with Grace Hill Neighborhood Services. Two researchers from the Center of Health Behavior Research at the School of Medicine will assist in the study: **Debra Haire-Joshu**, Ph.D., director of the Diabetes Education Center, and **Cheryl Houston**, adjunct instructor for Allied Health Professionals, a consultant dietitian and research coordinator.

**Leonard Berg**, M.D., professor of neurology, is chair of the Alzheimer's Association's Medical and Scientific Advisory Board. In that role he testified on Capitol Hill at a joint hearing on Alzheimer's disease held by the Select Committee on Aging of the U.S. House of Representatives and the Subcommittee on Aging of the U.S. Senate's Committee on Labor and Human Resources. On behalf of the association, Berg urged Congress to sharply increase the funding for Alzheimer research, pass the Family Caregiver Support Act, and move toward comprehensive long-term care protection as part of health care reform.

**Letha A. Chadiha**, Ph.D., assistant professor of social work and adjunct assistant professor of anthropology, and **Nancy Morrow-Howell**, Ph.D., assistant professor of social work, have been awarded a \$25,000 pilot grant to research the needs of African-Americans who care for Alzheimer's patients. The grant, awarded through the national office of the Alzheimer's Association, is titled "Increasing the Awareness of Alzheimer's Disease and Assessing the Unmet Needs and Strengths of African-American Caregivers of Elderly Alzheimer's Patients." Chadiha and Morrow-Howell, with the help of the St. Louis Alzheimer's Association, will develop an ethnic-sensitive awareness program on the disease for African-American clergy and laypersons. The program will assess the unmet needs of 50 people who care for Alzheimer's patients as well as document the strengths of the African-American church and family as a source of support to caretakers.

**Judith Cho**, a senior medical student, traveled to Bangladesh as one of 26 applicants chosen to receive the MAP/Reader's Digest

International Fellowship. The fellowship, given semiannually by MAP International, a Christian global health and development organization, provides residents, interns and senior medical students from North America the opportunity to serve at remote clinics and hospitals in developing countries.

**Andrew D. Dimarogonas**, Ph.D., William Palm Professor of Mechanical Design, has co-authored a book titled *Vibration for Engineers*. The book, which he wrote with S.D. Haddad of Stanford University, was published by Prentice Hall, Englewood Cliffs, N.J.

**Patrick Gibbons**, Ph.D., professor of physics, and **Thomas Bernatowicz**, Ph.D., research associate professor of physics, were panelists for the National Research Council's Associateship Program in Washington, D.C. The panelists review applications for fellowships tenable at a number of federal research laboratories. The quality-ordered evaluations they produce are the basis for the fellowship awards made by the council.

**Jane Loevinger**, Ph.D., William R. Stuckenberg Professor of Human Values Emerita, gave a talk on "Conformity and Conscientiousness: One Factor or Two Stages?" at a conference in Palm Springs, Calif. The conference topic was "Lives Through Time." It was sponsored by the American Psychological Association, the Department of Psychology of the University of California, Riverside, and the Murray Research Center of Radcliffe College. She also gave a talk on the same topic at a Harvard University seminar sponsored by the Department of Human Development and Psychology of the Graduate School of Education. She recently co-authored a chapter on "Development of the Self as Subject" in a book on *The Self*. Her chapter on "Personality Structure and the Trait-Situation Controversy: On the Uses of Low Correlations" appeared in a book, titled *Thinking Clear About Psychology*. She is the 1991 recipient of the Murray Award for the study of personality from the Society of Personality and Social Psychology, a division of the American Psychological Association (APA). In August she will deliver her award address at the APA convention in Washington, D.C. The title will be "Has Psychology Lost its Conscience?"

**Martin J. Mangino**, Ph.D., research assistant professor in the Department of Surgery, received a five-year grant from the National Institutes of Health to study lipid mediators of inflammation during intestinal ischemia. The project also examines methods of preserving intestinal segments from organ donors prior to intestinal transplantation.

**Van McElwee**, lecturer in performing arts, has received a travel grant from the Indian government to produce a videotape on India architecture. McElwee's videos "Refraction" and "Distance" were screened at the Kitchen in New York City. Two of his video pieces were chosen for exhibition in the "New Video of North America" category of the La Saison de Video Exhibition in France. He was one of five artists represented in the category. Another of his works was shown at the Fifth Certamen Internacional de Video in Tervel, Spain.

**Matthew R. Moynihan**, assistant affiliate professor of architecture, received the American Society of Landscape Architects Award of Excellence for the design of the Fox/Sarcachan Garden. Moynihan also received the society's Honor Award for designing the landscape of the Hoffmeister residence in St. Louis. Moynihan's firm additionally received the Missouri Governor's Treescape Award for designing Maritz Inc.'s South Campus.

**Mark Rollins**, Ph.D., assistant professor of philosophy, presented a paper titled "Picture Parsing" at the American Philosophical Association Eastern Division meeting in New York. He also presented a paper titled "Mental Imagery: On the Limits of Cognitive Science," at the American Society for Aesthetics conference in Portland, Ore. He was a participant in a three-day conference titled "Perspectives on Mind," hosted by the Department of Philosophy and funded by the James S. McDonnell Foundation. He participated in a session titled "Aesthetics Naturalized" at the American Philosophical Association Pacific Division meeting in Portland, Ore. His book, *Mental Imagery: On the Limits of Cognitive Science*, recently was issued in paperback. He is editing a critical anthology titled *Arthur Danto and His Critics*, to be published by Basil Blackwell next year.

**Peter H. Ruger**, J.D., general counsel, was a speaker at the 13th annual National Conference on Law and Higher Education in Clearwater Beach, Fla. The event was sponsored by the Continuing Legal Education Department of Stetson University's College of Law. Ruger spoke at a session titled "Antidote to LA Law: A Look Inside the Legal Profession Today," and another session on academic and administrative affairs.

**Michel Rybalka**, Ph.D., professor of French, has been promoted by the French government to the rank of officier in the order of Academic Palms. He received the distinction of chevalier in 1983. He was a keynote speaker at an international colloquium on the French writers Vian, Queneau, and Prevert at the University of Victoria, British Columbia. He also lectured at the University of Washington in Seattle, and at Simon Fraser University in Vancouver. Three of his editions of Jean-Paul Sartre's work: *Oeuvres romanesques* in the Pleiade collection, *Oeuvres de jeunesse*, and *Un theatre de situations*, have been republished in revised form by Gallimard in Paris. He is organizing an international colloquium, scheduled for October at the University, to mark the 70th birthday of writer Alain Robbe-Grillet, who will be teaching at Washington during the fall semester.

**Marc H. Schieber**, M.D., Ph.D., assistant professor of neurology and neurobiology, delivered an invited talk titled "Distributed Neuronal Activity in Three Cortical Motor Areas During Visually Cued Individuated Finger Movements" at an international symposium titled Voluntary Motor Control by the Brain at the National Institute for Physiological Sciences in Okazaki, Japan.

**Thomas Schiff**, D.D.S., professor emeritus of diagnostic affairs in the former School of Dental Medicine, delivered a series of lectures on maxillofacial radiology at the 15th annual Brazilian Dental Association meeting in Sao Paulo.

**Henry I. Schvey**, Ph.D., professor and chair of performing arts, delivered a paper titled "Foxes and Crows: Greed and Avarice in Ben Jonson's 'Volpone' and David Mamet's 'Glengarry, Glen Ross'" at the Mid-America Theatre Conference held in Chicago. At the conference, Schvey was named co-chairman of the Theatre History Symposium for the 1993 conference.

**Kathy Steiner-Lang**, director of the International Office, and **Lilian C. Fernandez**, J.D., adjunct professor in the School of Law, spoke at a seminar titled The New Immigration Act: The Regulations Are Finally Out. The seminar, held in St. Louis, was presented by the Immigration Law Committee of the Bar Association of Metropolitan St. Louis in cooperation with the Missouri/Kansas Chapter of the American Immigration Lawyers Association.

**Mary Troy**, lecturer in English, read from her story "Turning Colder" at the Missouri Philological Association meeting held in St. Louis. Her story titled "The Alibi Cafe" was published in the spring issue of The American Literary Review. Her paper titled "Jean Rhys' Women" was read at the recent South Central Modern Language Association annual meeting.

**Michael Valente**, Ph.D., assistant clinical professor of audiology, gave an invited speech titled "Experiences With Digitally Programmable Hearing Aids" at the Mid-South Conference of Communication Disorders in Memphis, Tenn., and at the annual meeting of Audiologic Associates in Atlanta, Ga. In addition, he was an invited speaker on the same topic at a seminar held in Copenhagen, Denmark, that was sponsored by Oticon Corp.

**Guido L. Weiss**, Ph.D., professor of mathematics, delivered the Marden Lecture at the University of Wisconsin-Milwaukee (UWM). The lecture is named for Morris Marden, former chair of the Department of Mathematics at UWM. Weiss' lecture, delivered to undergraduate students, was titled "Why Fourier Series?" He also will deliver two Charles Phelps Taft lectures at the University of Cincinnati on May 7 and 8. The format of the Taft Lecture series includes a lecture for a general audience and one for mathematicians. Weiss' general topic will address the problems of mathematics education in the United States. His mathematics lecture will be on wavelets, a novel mathematical approach to signal analysis.

**Carl Wellman**, Ph.D., Hortense and Tobias Lewin Distinguished Professor in the Humanities, recently served for two weeks as the Killeen Chair Resident Scholar at Saint Norbert College in DePere, Wis. In addition to delivering a public lecture on the grounds of moral rights, he participated in a series of discussions with faculty, and talked to 10 classes in philosophy or social theory.

## Have you done something noteworthy?

Have you: Presented a paper? Won an award? Been named to a committee or elected an officer of a professional organization? The Washington University Record will help spread the good news. Contributions regarding faculty and staff scholarly or professional activities are gladly accepted and encouraged. Send a brief note with your **full name, highest-earned degree, current title and department** along with a description of your noteworthy activity to Notables, Campus Box 1070, or by electronic mail to p72245DP at WUVMC. **Please include a phone number.**



# Journal devoted to Lewis' career; students write tribute

Walter H. Lewis, Ph.D., professor of biology at Washington University, is the focus of the *Annals of the Missouri Botanical Garden* 1992, Vol. 79, Number 1, which recently was published. The issue is devoted entirely to Lewis' career and features an opening tribute to the biologist, written by three of his former doctoral students, William D'Arcy, Ph.D., Joan Nowicke, Ph.D., and Kenneth Robertson, Ph.D. The tribute highlights Lewis' 28-year affiliation with Washington University and the Missouri Botanical Garden. It also recognizes his many contributions to

botany and to ethnobotany, which he made with his wife, Memory Elvin-Lewis, Ph.D., professor of biomedicine. The proceedings of 14 papers, most given by Lewis' former students at an honorary program held Oct. 7, 1990, are included in the issue. The papers, which contained botanical research, were presented at the garden.

More than 100 colleagues and friends gathered that day to honor Lewis. Writing in "A Tribute to Walter H. Lewis," D'Arcy, Nowicke and Robertson state: "Although it is long before Walter's retirement, the organizers of this tribute felt that the passage of

his 60th birthday was sufficient reason to celebrate Walter's multifaceted and illustrious career and to recognize his enduring influence on those who have been fortunate to know him during the past 35 years."

The program at the garden, which coincided with the annual Botanical Garden Systematic Symposium, included a dinner and addresses by Peter Raven, Ph.D., Engelmann Professor of Botany and director of the Missouri Botanical Garden, and Barbara Schaal, Ph.D., professor of biology, and tributes by Lewis' former doctoral and postdoctoral students, John Semple, Ph.D., Thomas Croat, Ph.D., and Yutaka Suda, Ph.D.

"The program was touching, almost like a family affair," said Lewis. "Gathering the papers into an issue of *Annals of the Missouri Botanical Garden* was like putting the day into an album of sorts."

Lewis' students included in the issue are: Nowicke, curator of botany at the Smithsonian Institution, Washington, D.C.; D'Arcy, curator of botany, Missouri Botanical Garden; Robertson, curator of botany, Illinois Natural History Survey and adjunct professor of botany, University of Illinois; Semple, professor of biology, University of Waterloo, Waterloo, Ontario, Canada; Croat, A.B. Krukoff Curator of Botany, Missouri Botanical Garden; Suda, professor of biology, University of Iwate, Morioka, Japan; Daniel Austin, Ph.D., professor of biology, Florida

Atlantic University, Boca Raton, Fla.; Robert Faden, Ph.D., associate curator of botany, Smithsonian Institution; Frederick Utech, curator of botany, Carnegie Museum of Natural History and adjunct professor of botany, Carnegie-Mellon Institute and University, Pittsburgh, Pa.; and Alwyn Gentry, Ph.D., curator of botany, Missouri Botanical Garden. All of these students received their doctorates at Washington University, except Croat and Suda, who worked at Washington as postdoctoral students.

Lewis came to Washington University in 1964 on a faculty appointment in the biology department. He also held the position of botanist with the Missouri Botanical Garden. At the garden, he served as curator and director of the herbarium from 1964 to 1972 and today is senior botanist there as well as professor of biology at Washington University. The tribute notes the many contributions Lewis has made to the garden's botanical collections, cooperative efforts between the garden and Washington University, St. Louis University, Southern Illinois University at Edwardsville and the University of Missouri-St. Louis. It also recognizes his popularity as a teacher at Washington University, his ethnobotanical work in the Latin American rain forests with the Jivaro Indians, and the nearly 200 publications he has authored or co-authored in his career, among other accomplishments.

## Introduction to new faculty

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

**Rebecca L. Copeland**, Ph.D., assistant professor of Japanese language and literature, comes to Washington from the International Christian University in Tokyo, where she was an assistant professor in the humanities division and coordinator of education for the summer courses in the Japanese language. She received a bachelor's degree, with high honors, in 1978 from St. Andrews College in North Carolina. Copeland earned master's and doctoral degrees in Japanese literature in 1982 and 1986, respectively, from Columbia University. She has published several articles and translations as well as book reviews. Her book *The Sound of the Wind: the Life and Works of Uno Chiyo*, will be published this year.

**John Edward McCarthy**, Ph.D., assistant professor of mathematics, comes to Washington from Indiana University, where he was a visiting assistant professor of mathematics. He received a bachelor's degree in mathematical sciences in 1983 and a master's degree in mathematics in 1987, both from Dublin University, and a doctorate in mathematics in 1989 from the University of California, Berkeley. He has published many articles and is a National Science Foundation grant recipient.

**Stephan K. Schindler**, Ph.D., assistant professor of German, comes to Washington from Princeton University, where he was a lecturer. Originally from Germany, he received degrees in German and history in 1982 and 1986 from the University of Dusseldorf and Studienseminar Wuppertal, respectively. He received a doctorate in German in 1990 from the University of California, Irvine. Schindler's areas of interest include 18th- and 20th-century German literature, romanticism, German film, contemporary theory and German cultural and intellectual history.

**Bente Villadsen**, assistant professor of accounting, comes to Washington from Yale University, where she received a master's degree in philosophy in 1990 and a doctorate in managerial accounting and control in 1991. Originally from Denmark, she received bachelor's and master's degrees in mathematics-economics in 1982 and 1984, respectively, both from the University of Aarhus in Denmark. Prior to her doctoral studies, Villadsen worked as a research assistant and consultant at Risoe

National Laboratory in Denmark, where she did energy demand forecasting and developed computer programs to aid optimal selection and sequencing of offshore oil and gas fields.

**Mladen Victor Wickerhauser**, Ph.D., associate professor of mathematics, comes to Washington from the Universite Aix-Marseilles, where he was a visiting associate professor. He received a bachelor's degree in mathematics in 1980 from the California Institute of Technology. Wickerhauser received a master's degree and a doctorate in mathematics in 1982 and 1985, respectively, from Yale University. He is the author of numerous refereed papers, published or accepted for publication, in addition to several computer programs.

**A. Kevin Williams**, Ph.D., assistant professor of political science, comes to Washington University from the State University of New York at Buffalo, where he held the same position. He received a bachelor's degree in political science and economics from Howard University in 1973, a master's degree in 1976, and a doctorate in 1987, both in political science, from the University of California, Berkeley. He is the author of several papers. In 1990 he co-authored a report titled "Good Education in Oakland: Strategies for Positive Change." He co-authored the paper during his tenure as a staff member for the Commission for Positive Change in the Oakland Public School System and the Urban Strategies Council. His areas of interest include public administration, public law, and American politics.

**Gautam N. Yadama**, Ph.D., assistant professor of social work, comes to Washington from the University of Nevada, Reno, where he held the same position. He received a bachelor's degree in management in 1983 from Wilkes College in Wilkes-Barre, Pa., and a master's degree in 1985 and a doctorate in 1990, both in social policy, planning and administration, from the School of Applied Social Sciences at Case Western Reserve University. Previously, he served as a program researcher for the Medicaid Adolescent Rehabilitation Program/Catholic Counseling Center in Cleveland, Ohio. He was responsible for monitoring and evaluating the \$2 million state-funded program serving inner-city youth with drug and alcohol addiction. Yadama has conducted many research projects. Most recently he served as principal investigator, evaluating services to severely emotionally disturbed children in Nevada. His research interests include the impact of community and social forestry programs on disadvantaged populations, and the social and economic consequences of land-based programs implemented on common property.

## Shi Hui Huang elected to Board of Trustees

Shi Hui Huang, M.D., an internationally prominent industrialist and Washington University trained neurosurgeon, has been elected to the Washington University Board of Trustees, Chancellor William H. Danforth has announced.

Huang is chairman of the board of the Sen Yang Industrial Corp.,



Shi Hui Huang

Taiwan, a leading manufacturer and assembler of Honda automobiles and motorcycles. He also is chairman of the Ching Fong Investment Co. and is associated with Cathay Investment and Trust Co., Ltd.

"We are fortunate to attract a person of Dr. Huang's stature and strengths to our board and I know we will benefit from his participation and counsel," Danforth said.

In 1954, Huang was one of the first Asians to come from Taiwan to Washington's School of Medicine to receive full neurosurgical training

under the renowned Henry Schwartz. During that time he was joined by his fiancée, Janet Lin, also from Taiwan. They were married in St. Louis in 1958.

Huang later returned to Asia, where he developed neurosurgery in Japan by establishing a neurosurgery center at Yodogawa Christian Hospital in Osaka and by training neurosurgery residents. He returned to Washington University/Barnes Hospital's neurosurgery department in 1975 and served at the Veterans Administration Hospital and the former City Hospital.

Upon the death of his father in 1979, Huang embarked on his second career — business. He continued his professional contribution to medicine as professor of medicine at Taipei Medical College in Taiwan.

In 1990 he received a Distinguished Alumni Award at the Washington University Founders Day banquet. This honor is bestowed on prominent alumni "in recognition of outstanding professional achievement, contribution in areas of public service and exceptional service to the University."

## Strohm promoted to deputy general counsel

Leslie Chambers Strohm recently was promoted to deputy general counsel at Washington University, Peter Ruger, general counsel, has announced.

She is now one of the highest ranking women at the University, Ruger said.

Strohm, who has been at the University since 1984, previously was associate general counsel. She is a national authority on the law of AIDS and has published and spoken extensively in this field.

"Deputy General Counsel Leslie Chambers Strohm is a superb lawyer," says Ruger. "She is regarded by

her colleagues as the nation's leading authority on the law of AIDS in the academic health care setting. Her contributions to the University, and particularly the School of Medicine, have been substantial. All of her colleagues in the Office of General Counsel are delighted by this further recognition of her abilities."

A native of Indiana, Strohm graduated magna cum laude from the University of Michigan Law School in Ann Arbor. She received her undergraduate degree in mathematics from DePauw University in Greencastle, Ind.



# CALENDAR

April 23-May 2

## LECTURES

### Thursday, April 23

**11 a.m. Dept. of Mathematics Seminar,** "Complex Dynamics," Christobal Gonzalez, WU grad student. Room 199 Cupples I.

**Noon. Dept. of Molecular Biology and Pharmacology and Dept. of Pediatrics Seminar,** "Mammalian Sperm Receptor Genes and Glycoproteins," Paul Wassarman, chair, Dept. of Cell and Developmental Biology, Roche Institute of Molecular Biology. Room 423 McDonnell Medical Sciences Bldg.

**1:10 p.m. George Warren Brown School of Social Work Lecture,** "Issue of Inclusion in The Women's Movement: A Social Work Perspective," Nancy Humphreys, dean, School of Social Work, U. of Connecticut. Brown Hall Lounge.

**2:30 p.m. Dept. of Mechanical Engineering Colloquium,** "Experiments on Boundary Layer Receptivity," David Parekh, McDonnell Douglas Research Laboratories. Room 100 Cupples II.

**3 p.m. Divisional Neuroscience Seminar Series,** "Diversity in Nerve Growth Factor Actions: Branch Points of a Protooncogene Signalling Cascade," Simon Halegoua, Dept. of Neurobiology and Behavioral Science, Syracuse U. of New York-Stoney Brook. Erlanger Aud., McDonnell Medical Sciences Bldg.

**4 p.m. Dept. of Earth and Planetary Sciences Colloquium,** "Mountain Belts of Venus: Comparison With Earth," John Suppe, prof., Dept. of Geological and Geophysical Sciences, Princeton U. Room 102 Wilson Hall.

**4 p.m. Dept. of Political Science Honors Convocation and First Annual Thomas H. Eliot Memorial Lecture,** "Political Elites in Washington and Chicago," John Heinz, Coon Professor of Law, Northwestern U., and Distinguished Research Fellow, American Bar Foundation. Room 200 Eliot Hall.

**4 p.m. Dept. of Chemistry Seminar,** "Lipase Catalyzed Syntheses of Enantiomerically Pure Compounds," Romas Kazlauskas, prof., McGill U. Room 311 McMillen.

**4:30 p.m. Dept. of Mathematics Colloquium,** "K1 of Exact Categories," Clayton Sherman, prof., Southwest Missouri State U.-Springfield. Room 199 Cupples I.

**4:30 p.m. Divisional Cell and Molecular Biology Student Sponsored Seminar,** "Replication, Silencing, and Epigenetic Inheritance of Transcriptional States," Jasper Rine, Dept. of Molecular and Cell Biology, U. of California-Berkeley. Erlanger Aud., McDonnell.

**6:15 p.m. European Studies Program, Goethe Institute, Assembly Series, Dept. of Germanic Languages and Literatures, Dept. of Philosophy and Religious Studies Program Present a Lecture,** "Moral Choice and the Ecological Crisis," Carl Amery, German author and cultural critic. Women's Bldg. Lounge.

### Friday, April 24

**9:15 a.m. Pediatric Grand Rounds,** "Pancreatitis in Childhood," Mark Lowe and Jerry Rosenblum, asst. professors of pediatrics, WU School of Medicine; Division of Gastroenterology and Nutrition, St. Louis Children's Hospital. Clopton Aud., 4950 Audubon Ave.

**11 a.m. Dept. of Mathematics Ph.D. Oral,** "Characterization of the Besov Spaces via the Commutator Operator of Coifman, Rochberg and Weiss; a Multiplier Theorem for the Semigroup of Contractions," Maciej Paluszynski, WU grad student. Room 199 Cupples I.

**Noon. Human Studies Committee Educational Seminar,** "Nazi Doctors and Their Crimes Against Humanity," Ernest Prentice, asst. dean for research, U. of Nebraska. Wohl Aud., Wohl Hospital Bldg.

**Noon. Dept. of Cell Biology and Physiology Seminar,** "Polypeptide Growth Factors: Diversity of Expression and Activity," Thomas Deuel, prof., medicine and biochemistry and molecular biophysics, WU School of Medicine; director of Oncology at Barnes and Jewish hospitals. Room 423 McDonnell Bldg.

**1 p.m. School of Engineering and Applied Physics Seminar,** "Magnetic Resonances in Recorded Transitions," M. Nick Johnson, grad student, WU Dept. of Electrical Engineering. Room 305 Bryan Hall.

**3 p.m. Dept. of Mathematics Seminar,** "Spectral Decomposition and Almost Everywhere Convergence," Earl Berkson, prof. of Mathematics, U. of Illinois at Urbana-Champaigne. Room 199 Cupples I.

**4 p.m. Division of Biology and Biomedical Sciences Program for Cancer Research Seminar,** "The W/S1 Signal Transduction Pathway and the Control of Hematopoiesis," Alan Bernstein, Division of Molecular and Developmental Biology, Samuel Lunefeld Research Institute, Mount Sinai Hospital, Toronto, Canada. Third Floor Aud., Children's Hospital, 400 S. Kingshighway.

**4 p.m. Dept. of Anatomy and Neurobiology Seminar,** "An Essential Set of Kt Channels

Conserved in Flies, Mice and Humans," Larry Salkoff, assoc. prof., WU Dept. of Anatomy and Neurobiology. Room 928 McDonnell Bldg.

### Saturday, April 25

**9 a.m. Saturday Morning Neural Science Seminar,** "Growth Factors and Oncogenes: Oncogenes and Suppressor Genes," Garrett Brodeur, assoc. prof., Dept. of Pediatrics and Genetics. Erlanger Aud., McDonnell Bldg.

### Monday, April 27

**Noon. Dept. of Biology Lecture,** "Cyanobacterial and Other Prokaryotic Gene Rearrangements," Jim Golden, assoc. prof., Dept. of Biology, Texas A&M U. Room 309 Rebstock.

**1:30 p.m. Assembly Series Lecture,** "From Birth to Death: The Life Cycle in Renaissance Florence," Gene Brucker, prof. emeritus, Dept. of History, U. of California-Berkeley. Room 201 Steinberg.

**3 p.m. Dept. of Mathematics Ph.D. Oral,** "On the Automorphism Group of  $k[X,Y,Z]$ ," Gene Freudenburg, WU grad student. 199 Cupples I.

**4 p.m. Dept. of Biology Seminar,** "Development in a Prokaryote: Cyanobacterial Differentiation and Gene Rearrangements," Jim Golden, assoc. prof. Dept. of Biology, Texas A&M U. Room 322 Rebstock Hall.

**4 p.m. Graduate Program in Immunology Seminar,** "Mechanisms of Cutaneous Inflammation," Thomas Kupper, assoc. prof., Division of Dermatology, WU Dept. of Medicine. Third Floor Aud., Children's Hospital, 400 S. Kingshighway Blvd.

**4 p.m. Dept. of Genetics Special Seminar,** "Recent Results on Clonality in Parasitic Protozoa: Epidemiological and Medical Implications," Michel Tibayrenc, Montpellier, France. Room 816 McDonnell Bldg.

**4 p.m. Dept. of Psychology Colloquium,** "Research on the Psychology of Enjoyment," Mihaly Csikszentmihalyi, Dept. of Psychology, U. of Chicago. Room 102 Eads.

**5 p.m. The Career Center Presents** a talk on career changes by Howard Figler, career consultant. May Aud., Simon Hall.

**6:15 p.m. Dept. of Germanic Languages and Literatures Lecture,** "Das Vorbild der Naturwissenschaft und die Antwort der Literatur im deutschen Roman des 18. Jahrhunderts," Hans Esselborn, prof. of German, U. of Cologne. Room 417 Ridgley Hall.

### Tuesday, April 28

**9 a.m. Dept. of Psychiatry Presents the Sixth Alex H. Kaplan, M.D., Lectureship,** "Conceptualizing the Mental Representation of Relationships: Research and Theoretical Issues," Daniel N. Stern, professeur ordinaire, Faculte de Psychologie, Universite de Geneve, Suisse; faculty, Columbia U., Center for Psychoanalytic Training and Research; and adjunct professor of psychiatry, Cornell U. Medical School.

**3 p.m. Dept. of Mathematics Seminar,** "Boundary and Entropy of Random Walks on Locally Compact Groups Revisited," Vadim Kaimanovich, U. of Edinburgh. 199 Cupples I.

**5 p.m. Dept. of Pediatrics Lecture,** "Mechanisms of Cholera Toxin Action on a Polarized Human Intestinal Epithelial Cell Line: Role of Vesicular Traffic," Wayne Lencer, asst. prof. of pediatrics, Harvard Medical School. Third Floor Aud., Children's Hospital.

### Wednesday, April 29

**7 a.m. Dept. of Surgery Visiting Professor Lecture,** "Problems in the Management of Pancreatitis," David C. Carter, Regius Professor of Clinical Surgery, University of Edinburgh, Royal Infirmary, England. East Pavilion Aud.

**8 a.m. Dept. of Obstetrics and Gynecology Grand Rounds,** "Blood Borne Pathogens and Risks to Health Care Workers — Applying OSHA Guidelines to Your Workplace," Vicky Fraser, WU instructor in medicine, medical director of Barnes Employee Health. West Pavilion Amphitheater, Barnes Hospital.

### Thursday, April 30

**9:30 a.m. Dept. of Internal Medicine Grand Rounds Presents the 16th Annual I. Jerome Flance Visiting Professor Lecture,** "The Many Faces of Pulmonary Hypertension," Kenneth Moser, prof. of medicine, director, Pulmonary and Critical Care Division, U. of California-San Diego Medical Center. Clopton Aud., 4950 Audubon Ave.

**11 a.m. Dept. of Mathematics Seminar,** "Complex Dynamics," Richard Laugesen, WU grad student. Room 199 Cupples I.

**2:30 p.m. Dept. of Mechanical Engineering Seminar,** "Development of Intermetallics for High Temperature Applications," S.M.L. Sastry, WU prof. of metallurgy and materials science and prof. of physics. Room 100 Cupples II.

**4 p.m. Dept. of Chemistry Seminar,** "Radiochemistry in Medicine: Production and Application of Radioactive Drugs," Michael Welch, prof., WU Dept. of Radiology. Room 311 McMillen.

**4:30 p.m. Dept. of Physical Therapy Steven J. Rose Lectureship,** "Rehabilitation of Balance

Disorders in the Elderly," Fay Horak, physical therapist, assoc. scientist, R.S. Dow Neurological Sciences Institute, Good Samaritan Hospital; adjunct assoc./asst. prof., Depts. of Neurology and Physiology, Oregon Health Sciences U. Moore Aud., 4565 McKinley Ave.

### Friday, May 1

**Noon. Cell Biology and Physiology Seminar,** "Cellular Roles of Yeast 70 kD Heat Shock Proteins," Elizabeth Craig, U. of Wisconsin. Room 423 McDonnell Medical Sciences Bldg.

**Noon. Dept. of Metabolism Seminar,** "Etiology and Pathogenesis of NIDDM: Genetic and Metabolic Aspects (Lessons From Family Studies in Finland)," Leif Groop, Helsinki U. Schwarz Aud., Maternity Hospital.

**4 p.m. Program for Cancer Research Seminar,** "Developmental Properties of Hematopoietic Stem Cells," Ihor Lemischka, Princeton U. 8841 Clinical Sciences Research Bldg.

**6 and 8:30 p.m. Washington University Association Travel Lecture Series Presents** "Portraits of the Great Far East," with Doug Jones. Jones has produced 13 feature-length travel films and makes more than 200 appearances a year across the country. Graham Chapel. Cost: \$4.50 at the door. For more info., call 935-5212.

## PERFORMANCES

### Thursday, April 23

**8 p.m. Performing Arts Dept. Presents** "The Art of Dining." (Also April 24, 25, same time, and April 26 at 2 and 7 p.m.) Edison Theatre. Cost: \$7 for general public; \$5 for students, senior citizens and WU faculty and staff. For more info., call 935-6543.

### Friday, April 24

**8 p.m. Edison Theatre Presents** "Michael Moschen in Motion." (Also April 25 at 2 and 8 p.m., and April 26 at 2 p.m.) Moschen is a new wave juggler. Edison Theatre. **All performances sold out except for April 25 children's show at 2 p.m.** Cost: \$7. For more info., call 935-6543.

## MUSIC

### Thursday, April 23

**8 p.m. Dept. of Music Presents** a Washington University Vocal Jazz Ensemble Concert. Steinberg Hall Aud. Free.

### Saturday, April 25

**8 p.m. Dept. of Music Presents** a Black Composer Repertory Chorus Concert. Steinberg Hall Aud. Free. For more info., call 935-5581.

### Sunday, April 26

**2:30 p.m. Dept. of Music Chancellor's Concert** with the Washington University Symphony Orchestra. Free. Graham Chapel.

**8 p.m. Dept. of Music Presents** a Spring Concert with the Chamber Choir of Washington University. Free. Christ Church Cathedral, 1210 Locust.

## EXHIBITIONS

**"Master of Fine Arts II."** April 24 through May 3. Gallery of Art, upper gallery, Steinberg Hall. Hours: 10 a.m.-5 p.m. weekdays; 1-5 p.m. weekends. Free. For info., call 935-5490.

**"Faculty Pieces From the Permanent Collection."** Through May 17. Gallery of Art, upper gallery, Steinberg Hall. Hours: 10 a.m.-5 p.m. weekdays; 1-5 p.m. weekends. Free.

**"Land Ho: Early Exploration of the Americas."** Through June 30. Olin Library, Special Collections, Level 5. Hours: 8:30 a.m.-5 p.m. weekdays. Free.

**"Joseph Beuys Video Collection."** Through April 26. Gallery of Art, lower gallery, Steinberg Hall. Hours: 10 a.m.-5 p.m. weekdays; 1-5 p.m. weekends. Free.

**"The Book as Patient, Crisis of the Printed Text."** Through May 15. Glaser Gallery, 7th Floor, Medical Library, 660 S. Euclid Ave. Hours: 9 a.m.-5 p.m. weekdays. For more info., call 362-7080.

## FILMS

### Thursday, April 23

**5:30 p.m. Edison Theatre and the Performing Arts Department Present** "The Railway Station Man." AMC Esquire Theatre, 6706 Clayton Road. (Also at 7:15 p.m. "Daughters of the Dust" and at 9:15 p.m. "Delicatessen".) Film festival is presented by The Consortium for a Saint Louis Film Festival, which includes Edison

Theatre and the Performing Arts Department. The festival continues through April 29. For more information, call 961-1103.

### Friday, April 24

**7 p.m. Gay and Lesbian Association of Student Social Workers Presents** "An Early Frost." Brown Hall Lounge. Free.

**8 and 10:30 p.m. Filmboard Feature Series Presents** "Young Frankenstein." (Also April 25, same times.) Room 100 Brown Hall. \$3.

### Friday, May 1

**7:30 p.m. The St. Louis Psychoanalytic Institute Presents** "Last Tango in Paris," with a lecture by Gerald Izenberg, prof., WU Dept. of History. St. Louis Art Museum Aud. Cost: \$3 for general public; \$2 for students and senior citizens; \$1 for Friends of the Psychoanalytic Institute and the Art Museum. For more info., call 721-0072.

## SPORTS

### Saturday, April 25

**1 p.m. Baseball.** WU vs. Blackburn College. Kelly Field.

## MISCELLANY

### Friday, April 24

**10 a.m. Fourth Annual Amyotrophic Lateral Sclerosis-Phi Delta Theta Golf Tournament.** Norwood Hills Country Club, off Lucas and Hunt Road. Cost: \$150. Includes lunch, 18 holes of golf, prizes, hors d'oeuvres, and drinks. For more info., call 935-3109.

### Saturday, April 25

**9 a.m. School of Fine Arts Ceramic and Glass Spring Sale by Washington University Faculty and Students.** Ongoing demonstrations in glass and clay. WU Lewis Center, 725 Kingsland Ave.

**1 p.m. Center for American Indian Studies Presents a powwow.** Food and American Indian items will be on sale. Francis Gymnasium. Free.

### Monday, April 27

**8:30 a.m. Center for the Study of Data Processing Presents a Seminar,** "Project Management." (Seminar continues through April 29.) Thomas Browdy, asst. director, Center for the Study of Data Processing, and Martin Herbert, senior technical associate, CSDP. Cost: \$150 for faculty, staff and students. For public pricing and more info., call 935-5380.

**8:30 a.m. Center for the Study of Data Processing Presents a Seminar,** "Unix Systems Administration." Laine Education Enterprises. Digital Consulting, 11861 Westline Industrial Drive. Cost: \$200 for faculty, staff and students. For public pricing and more info., call 935-5380.

### Wednesday, April 29

**4 p.m. Faculty Senate Meeting.** Room 113 Simon Hall. For more info., call 935-7304.

**5:15 and 6:15 p.m. Adult Tennis Lessons for beginning and intermediate players.** (Continues through May 27 on Monday and Wednesday evenings.) Cost: \$45. WU Tao Tennis Center. For more info., call 935-5220.

### Thursday, April 30

**8:30 a.m. Computer-Integrated Manufacturing Center Presents a Seminar,** "Continuous Flow Manufacturing," Robert Carringer, vice president, regional operations, Institute of Business Technologies. STIM Lab, 1144 Hampton Ave. Cost: \$50 for faculty, staff and students. For public pricing and more info., call 935-4444.

**8 p.m. Dept. of Music Opera Workshop Presents** Opera Scenes in English from "Julius Caesar," "Turn of the Screw" and others. Free. Graham Chapel. For more info., call 935-5581.

### Friday, May 1

**9 a.m. Computer Integrated Manufacturing Center Presents a Seminar,** "Intellectual Process Productivity," Robert Carringer, vice president of regional operations, Institute of Business Technology. STIM Lab, 1144 Hampton Ave. Cost: \$50 for faculty, staff and students. For public pricing and more info., call 935-4444.

## Calendar Deadline

The deadline to submit items for the April 30-May 9 calendar of the Record is noon April 24. Items must be typed and state **time, date, place, nature of event, sponsor and admission cost.** Incomplete items will not be printed. If available, include **speaker's name and identification** and the **title of the event;** also include your name and telephone number. Send items to Melissa Kohne, Box 1070.