At 91, oldest employee says goodbye to gatekeeping duty

Herb Autenrieth, a gatekeeper at Tyson Research Center for 23 years, says farewell to gatekeeping duty that he’s “quitting,” not retiring. Autenrieth refused to let in Tyson’s former director of construction and maintenance, Raymond Flint. “He was hired by Ray Flint,” Coles began. Autenrieth continued the story, “Well, they told me not to let no one in. Raymond Flint drove up to the gate and I wouldn’t let him in. You see, he had hired me over the phone. My boss at the time came running over the hill. He said, ‘Open the gate, Herb, that’s Mr. Flint.’ In a couple of hours, my boss came back. You know what he said? He said, ‘Herb, you’re a damn good gatekeeper.’”

Herb Autenrieth, 91, the University’s oldest employee, says farewell to guard duty at the Tyson Research Center after 23 years of service. Haskin, a 23-year veteran of studying the chemistry of lunar soils and rocks, says that the moon is vital to the country’s space plans because of its abundant resources, climate, technology and life support, fuel and construction, and because of its handy location in the solar system. A key leader in the push to return to the moon is geochemist Richard A. Roloff, president of Plaza Development Co. In addition to the Ritz-Carlton Hotel St. Louis and the University Medical Center Redevelopment Corp., he was a member of the executive committee, as chair of the building and development business.

Richard A. Roloff, president of Plaza Development Co., is the executive vice chancellor at Washington University and former chief of the planetary and earth sciences division of NASA’s Johnson Space Center in Houston, Texas. Haskin, a 23-year veteran of studying the chemistry of lunar soils and rocks, says that the moon is vital to the country’s space plans because of its abundant resources, climate, technology and life support, fuel and construction, and because of its handy location in the solar system. A key leader in the push to return to the moon is geochemist Richard A. Roloff, president of Plaza Development Co. In addition to the Ritz-Carlton Hotel St. Louis and the University Medical Center Redevelopment Corp., he was a member of the executive committee, as chair of the building and development business.

Rolf Rolof is named executive vice chancellor as a volunteer, Roloff has been active in the engineering and Central West End through his support of the Plaza Development Co. As a Washington University trustee, he has served on the executive committee, as chair of the building and development business and sponsors the Don A. Fisher Memorial Scholarship in engineering. As a volunteer, Roloff has been active in the engineering and Central West End through his support of the Plaza Development Co. As a Washington University trustee, he has served on the executive committee, as chair of the building and development business and sponsors the Don A. Fisher Memorial Scholarship in engineering.

Making a comeback

Moon’s abundant resources could supply world with energy for thousands of years

An old friend is still waiting for another visit.

The moon, seemingly out of favor with the U.S. space program since the last of the Apollo missions in 1972, will be a cornerstone of the nation’s space plans for the coming decades. A key leader in the push to return to the moon is geochemist Richard A. Roloff, president of Plaza Development Co. In addition to the Ritz-Carlton Hotel St. Louis and the University Medical Center Redevelopment Corp., he was a member of the executive committee, as chair of the building and development business. As a volunteer, Roloff has been active in the engineering and Central West End through his support of the Plaza Development Co. As a Washington University trustee, he has served on the executive committee, as chair of the building and development business and sponsors the Don A. Fisher Memorial Scholarship in engineering.

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Moon's resources — continued from p. 1

The burning fuel in the reactor. Tritium decays with a half-life of about 12 years, which prevents the process from going on forever. However, helium-3 can be made on Earth by first producing tritium, then using it in the nuclear reactor.

Radioactive waste?

But fusion reactors produce long-lived radioactive products, the most powerful of radioactive waste. Using or storing tritium requires handling a radioactive material. Furthermore, when tritium and deuterium fuses, the reaction gives off a lot of heat. This heat can cause structural damage to reactor walls and produce even more radioactive material. Helium-3, neither radioactive nor harmful to the environment, reacts with neutrons and yields a whole lot of energy, which the reactor stops essentially. Less than one percent of the energy released from the deuterium-helium-3 reaction comes out in the form of gamma-rays, which can produce some radioactivity. The mining of helium-3 from the moon instead of producing it on Earth, then, eliminates the need for a fusion reactor.

"It is Gratifying to see that President Bush has Novel Idea that we will return to the moon to stay."
— Lary A. Haskin

A major impediment to establishing a base on the moon has long been the difficulty in maintaining life-support systems. But, says Kulcinski, mining a ton of helium-3 would provide enough by-products to support tens of thousands of people on the moon. The process that produces a ton of helium-3 also produces 500 tons of nitrogen, 3,300 tons of water, 1,500 tons of natural gas, 3,600 tons of carbon-oxygen compounds and 6,100 tons of hydrogen.

The United States will be taking a serious political and economic role by leaving the moon to others to explore, says Haskin.

"There's no more convenient place to get experience living and working on another planet, and we can get back and forth to it in just a few days. We can even monitor the health and safety of the astronauts and robots there."
— Tony Fitzpatrick
John R. Bowen, Ph.D., assistant professor of anthropology, has received an award from the Spencer Foundation for his submission of modernist Muslim knowledge in Indonesia. His book, "Islamic Politics and Poetics," recently was published by Yale University Press.

Sally A. Goldman, Ph.D., assistant professor of computer science, has received a $25,000 junior faculty grant from the GE Foundation. The award is part of the $15 million "Faculty Award Program" established by the GE Foundation to address the critical shortage of female and minority faculty in engineering, mathematics, and computer science. Goldman will use the money to support a doctoral graduate student in her special field of interest, computational learning theory, a developing field of computer science that employs the use of mathematics to explore the theory behind machine learning. The building that machines learn from is an important goal of artificial intelligence, which strives to design machines that behave intelligently. In contrast to standard machine learning research, computational learning theory tries to define formal mathematical models of machine learning that enable performance analysis of learning algorithms. The insight gained from this work is expected to contribute to applications of machine learning.

A St Louis native, Goldman joined the Washington University faculty in August 1990, after receiving her doctorate in electrical engineering and computer science from Massachusetts Institute of Technology (MIT). In 1991, she received a fellowship from the same field in 1987 from MIT and a bachelor's with honors in computer science from the University of Chicago in 1984. At MIT, Goldman was a research assistant in the laboratory for teaching assistant for an algorithms course. In the summers of 1982 through 1984, she worked on the research staff of the Central Institute for the Deaf.

Have you done something noteworthy?

Have you: Presented a paper? Won an award? Founded a new startup? Selected as an officer of a professional organization? Published a book? Spoken at a national or international conference? Helped spread the good news? Contributed to an area of knowledge? We'd love to hear about your accomplishments! Please send us your news.

GE Foundation awards grants to address shortage of female and minority faculty

Sally A. Goldman, Ph.D., assistant professor of computer science, has received a $25,000 junior faculty grant from the GE Foundation. The award is part of the $15 million "Faculty Award Program" established by the GE Foundation to address the critical shortage of female and minority faculty in engineering, mathematics, and computer science. Goldman will use the money to support a doctoral graduate student in her special field of interest, computational learning theory, a developing field of computer science that employs the use of mathematics to explore the theory behind machine learning. The building that machines learn from is an important goal of artificial intelligence, which strives to design machines that behave intelligently. In contrast to standard machine learning research, computational learning theory tries to define formal mathematical models of machine learning that enable performance analysis of learning algorithms. The insight gained from this work is expected to contribute to applications of machine learning.

LEARN

Record

International teaching faculty who want to improve their pronunciation skills may now benefit from a free service offered by the Interna-
tional Office's English as a Second Language (ESL) program. The "filteree." said Frankly, as a supervisor, it's nice to have a sound-
Alcoholics inherit biological difference

Because the disease is sporadic and often preceded by a patient's denial of the problem, alcoholism is difficult to diagnose until dangerous, even life-threatening, complications have set in, confounding treatment. That's one reason why medical scientists have looked so assiduously for a marker — an easy-to-see but reliable signal — that is inherited along with the predisposition to alcoholism.

In the late 1980's, research at the School of Medicine, such a flag finally raised. From experiments in the laboratory of Eric Devor, Ph.D., have resulted the results of an earlier study showing that the enzyme activity levels between alcoholics and nonalcoholics. Devor also has found that the variation in enzyme activity can be passed on to offspring. This work ultimately could lead to a blood test for determining a person's susceptibility to alcoholism.

A foothold on the ladder

Precisely what the relationship between alcoholism and adenylate cyclase activity is, the investigators don't yet know. Devor says the enzyme is not actively involved in the metabolism of alcohol. "But it doesn't have to be in the metabolic pathway of alcohol to be a possible cause of alcoholism," comments P. Michael Connelly, Ph.D., distinguished professor of medical genetics and neurology at Indiana University School of Medicine.

Connelly calls the research "very helpful in the big effort to map the genes responsible for alcoholism." But, he adds, work remains to be done. "It would be more informative if the study were qualitative, not quanti-itative. We need to do additional research about enzyme activity, not about different forms of a gene in alcoholics and nonalcoholics. There may be just one, very important, gene involved here, as Devor's analysis suggests, but we have to find it to predict the risk for an individual. This is a major hint for where to look." In fact, Devor has begun a search for the gene responsible for the variation in enzyme activity as the next step in his research. Adenylate cyclase is one element in a complicated cascade of signals, together called the "second messenger pathway," that prompts cells to do their work. Devor explains. To measure the enzyme's activity in the signaling pathway, the researchers added a known amount of stimulant to a known quantity of blood platelets (the cells), then measured the output by quantifying the step in the cascade that follows adenylate cyclase. The major gene effect was found only when the adenylate cyclase activity was chemically stimulated. In baseline measurements, there was no significant difference. Each of the proteins at work in adenylate cyclase's signaling action is a product of a single gene, and for one of four likely candidates, Devor expects to find a fundamental genetic difference between alcoholics and non-alcoholics. He is locating and cloning those four genes, "taking apart the biological systems one at a time," he as he puts it.

Family patterns

Work is also proceeding on the other front: investigating adenylate cyclase activity in families relative to their alcoholism. On Devor's chart rating the level of enzyme activity, families in which alcoholism was present clustered well beneath control families, even for those individuals who had never had a drink and for alcoholics who had been abstinent for four years. Still to come, however, is research that concentrates on the activity level of adenylate cyclase in families with no history of alcoholism. Strict scientific method requires studies that begin with nonalcoholic families and show a high relative level of activity, "Before we can call this a direct measure of suscepti-bility to alcoholism," Devor says. "That won't be as easy as it might sound," he adds, pointing out that perhaps five percent of the population suffers from alcoholism. By the time a kind of laboratory marker for gene-regulation relatives, the likelihood of a perfectly "clean" profile by strict diagnostic standards is small.

Also to come are studies designed to link this biological marker to the type or types of alcoholism in which it plays a role. Early studies did not consider alcoholics by type, of which two are known and more are suspected. Much of the work classifying alcoholism into types has also been done by Washington University researchers, most notably C. Robert Cloninger, M.D. Cloninger's classic studies of alcoholics in Swedish families established the role of genes and their modes of inheritance. That work revealed two types of alcoholism: Type I, the more common, is characterized by drinking beginning in the second or third decade of life and little antisocial behavior. Both genetic and environmental factors are involved. Type 2 alcoholism is associated with social problems and is displayed only by males. Its heritabil-ity is much higher, regardless of environmental influences. More types may be identified, with greater or lesser genetic components. Nonetheless, using only adenylate cyclase activity levels as an indicator, the research accurately predicted the presence of alcoholism in families almost three-fourths of the time. "Not all alcoholism will be related to adenylate cyclase activity, nor all alcoholism even has a genetic component. So we're not talking about solving the problem completely," Devor acknowledges. The sophisticated enzyme analysis of the blood required to assess adenylate cyclase activity is not yet feasible on a population-wide, screening basis. But the promise of a reliable tool for the early diagnosis of at least some types of alcoholism is finally real. And, Devor says, the future is now. He anticipates a practical application of his work in a manner of years, not decades. He has already directed his group's efforts against susceptibility to alcoholism, sought for so long, will cut the huge costs extracted by western civilization's biggest drug problem.
The AIDS Clinical Trials Unit (ACTU) at the School of Medicine has opened a satellite facility at St. Louis Regional Medical Center. The facility, located in Regional Medical Center's Infectious Disease Clinic at 5554 Forsyth Blvd., is open from 8 a.m. to 12:30 p.m. Mondays and Thursdays with plans to expand hours to 8 a.m. to 4 p.m. Mondays, Wednesdays and Thursdays.

The satellite facility is open to anyone who qualifies for care at Regional Medical Center. The purpose of the facility is to make it easier for underserved populations, in particular the medically indigent, blacks and IV drug users, to participate in AIDS-related drug studies while receiving primary care for HIV infection at the Regional clinic.

The ACTU at the University of Missouri-St. Louis section of a 16-center national sponsored project. His research in recent years has been presented April 9 at the National Blood Pressure Education Program hypertension.

The award from the National High Blood Pressure Education Program was presented April 9 at the National Blood Pressure Education Program.

**Pharmacology's leaders to give lecture**

The three men who have led the School of Medicine's Department of Molecular Biology and Pharmacology over the last 44 years will gather May 16 to deliver the Lowry lecture in Pharmacology. The lecture is sponsored by the Lowry endowed professorship.

H. Mitchell Perry Jr., M.D., professor of medicine and pharmacology, who has served as head from 1976-89, was presented April 9 at the National Blood Pressure Education Program hypertension.

Gordon, M.D., will discuss "Pharmacology: Generational Views and Change." Philip Needleman, Ph.D., and Jeffrey I. Gordon, M.D., will discuss "Pharmacology: Generational Views and Change." For information, call 879-6410.

**Berg and Schreiber are named alumni endowed professors**

Two faculty members at the School of Medicine have been named alumni endowed professors.

Douglas E. Berg, Ph.D., is alumni professor in molecular microbiology and pharmacology. Berg is studying transposable elements — specific segments of DNA that are capable of moving from one location to another in the genome. Berg's work is focused on understanding how these elements move and how they affect the function of genes.

Berg was named as the first endowed professor in molecular biology and pharmacology at the University of Missouri-St. Louis. The endowed professorship was established in 1982 to provide a research opportunity for a distinguished scientist in the fields of biology and pharmacology. Berg is continuing his research on transposable elements, which are important for the development and spread of antibiotic resistance in bacteria. His work has led to the development of new therapies for treating infections caused by antibiotic-resistant bacteria.

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Protein will increase understanding of how nerves and muscles interact

Scientists at the School of Medicine have created the rudiments of an artificial synapse in connective tissue. They used synthetic protein that spurs the formation of nerve-cell receptors. This confirms researchers' suspicions about the role of the heretofore mysterious protein that spurs the formation of receptors, enabling them to identify a class of how nerves and muscles interact with each other at the molecular level. "This model will be helpful in further defining the protein needed for synapse formation," Merlie says. "It also will increase understanding of how nerve and muscle proteins control each other at the molecular level."

This basic research eventually could advance treatment of neuromuscular diseases like muscular dystrophy or Parkinson's disease. The work is described in the Feb. 1, 1991, issue of the journal Science. The paper details the group's efforts to discover more about the workings of the proteins that compose synapses.

Scientists have recognized for some time that nerve and muscle, normally concentrated under the postsynaptic membrane, has a close association with receptors for acetylcholine, one of the primary chemicals involved in the induction to occur. This association is between nerve cells and muscle cells. A receptor is a protein, usually found in the cell membrane where acetylcholine binds. Postsynaptic membranes contain to components within the cell. It is well known that acetylcholine receptors must cluster in the postsynaptic membrane in order for synapse formation to occur. However, this work shows for the first time that acetylcholine receptors are unable to cluster without the 43-kD protein.

For the study, Merlie and his colleagues placed adult and fetal acetylcholine receptors from mice into fibroblast cells. Then they introduced a cloned 43-kD protein and found that the acetylcholine receptors accumulated in large clusters on the surface of the postsynaptic membrane of the cell. "This suggests that 45-kilodalton protein can induce acetylcholine receptor clustering," Merlie says. "It also suggests that what must be direct contact between acetylcholine receptors and the 45-kD protein for cluster induction to occur.""The researchers also want to determine just where the 45-kD protein is. It seems to be present in heart, kidney and brain, but its significance is not known. One of the questions we're interested in is, why do muscle cells, nerve cells and brain cells know where they're supposed to go is somewhat of a mystery," Merlie comments. 'If we really want to know about are in vivo,' Merlie says. 'If we really want to know what a protein does during the development of a synapse, it is going to have to be in a live animal.' A Series of Firsts 

Over the years, Merlie and his colleagues have published a number of scientific papers detailing their findings. The group's most recent findings build on a number of advances in the Proceedings of the National Academy of Sciences in 1987, when the Washington University team cloned the first 45-kilodalton protein. The group has also discovered 5-laminen, another synaptic protein, and the first and among to clone and study the five genes for the acetylcholine receptor itself. "The group is trying to measure how quickly the receptors cluster each other at the molecular level, and mainly as a means of confirming the protein's clustering effects," Merlie says. "One of the things that plagued is us that receptors and 45-kD are so that they are clustered and unless they're clustered," Merlie says. "So it's possible that individual receptors are behind the membrane in a normal muscle already associated with a single molecule. But we wouldn't be able to tell that."

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University increases contributions to health insurance

Effective July 1, 1991, Washington University’s contributions toward the cost of health and dental insurance coverage for active full-time employees will increase to $150 per month. Active full-time employees working 50 percent time or more (but less than 100 percent) will receive $75 per month. Health and dental coverage will be effective one year after continuous service. The University’s contributions for union employees will be in accordance with the union contract.

Mammography test will be available on Hilltop Campus

On May 8, the Mallinckrodt Institute of Radiology and the University will be on the Hilltop Campus, providing mammography services to all employees.

For the location and to schedule a time for the test, call 362-7111. The charge will be $50 and must be paid at the time of the test. The employee should check their individual health insurance coverage for possible reimbursement.

Changes to retirement annuity are announced

Effective July 1, 1991, you may choose to invest your contributions and the University contributions to your retirement plan in the Vanguard family of funds or the Teachers Insurance and Annuity Association (TIAA)/College Retirement Equities Fund (CREF). A second change is the option to receive your retirement accumulation in a lump-sum upon attaining age 55 and after terminating employment with Washington University. Each of these changes and the new procedures are described in the following paragraphs.

The Vanguard option

Effective July 1, 1991, you may allocate contributions to the Basic Retirement Annuity to the Vanguard family of funds. See your retirement annuity mailing for particular options.

You may invest your contributions and the University contributions in either TIAA/CREF or Vanguard. One example of how you might allocate your investment is to allocate 100 percent of your salary reduction to Vanguard while allocating 100 percent of your University contribution to TIAA/CREF. However, you may not allocate 50 percent of the University allowance to Vanguard and 50 percent to TIAA/CREF or 50 percent of the salary reduction to each plan.

Transfers

The option of future contributions may be changed each month by completing the Allocation Change Form included in your retirement annuity mailing. This form will direct your monthly contributions from your payroll checks to TIAA/CREF or Vanguard. Allocating the contributions to the various accounts within TIAA/CREF and Vanguard will be made in accordance with the allocations on file with each carrier (TIAA or Vanguard).

Therefore, please complete the Retirement Annuity Payroll Authorization form and return to the appropriate benefits office should you desire to change the future contributions to the different carriers.

Transfers of previous contributions among the CREF accounts and Vanguard accounts may be made by contacting TIAA/CREF (1-800-842-2733) or Vanguard (1-800-545-1172) directly and requesting asset transfer kits. Any changes in allocation among accounts within each carrier should also be directed to the above numbers.

Effective July 1, 1991, TIAA account balances also will be available for transfers to Vanguard or Vanguard. The minimum transfer amount is $10,000 or the entire account balance if it’s less than $10,000. Transfers will take place over a 10-year period in substantially equal annual installments. Each installment will include principal and interest, plus dividends as declared each year by TIAA.

Cash settlement

Effective July 1, 1991, employees who are more than 55 years of age AND have separated from service (i.e., retirement, resignation, etc.) may receive a cash settlement under the basic retirement annuity without taking an annuity payout. Now participants may elect to receive cash or an annuity. Again, the cash option is available to those employees who are older than 55 and have separated from service.

Any amounts in CREF or Vanguard may be received in full in one payment. However, TIAA may be received only via a 10-year payout as discussed above under the "Transfers" section.

In order to receive the cash settlement at retirement, participants will be offered a counseling session with Kevin P. Naasbaum, director of benefits, to discuss the advantages and disadvantages of a cash settlement. Before the cash may be received, the participants will be asked to sign a waiver. Thus, any cash request must be initiated through the Hilltop benefits office.

Group Presentations

To help you understand these changes and new options, we have scheduled group presentations. They will be conducted at the following times and locations:

Medical Campus – May 2, 9 a.m., noon and 3 p.m.
May 3, 9 a.m., noon and 3 p.m.
Medical School Library Conference Room, 6th Floor

The presentations will last approximately 45 minutes, with a 15-minute question-and-answer session.

Contributions

Participants in the basic retirement annuity may change their tax-deferred contribution as of July 1, 1991. All eligible employees who are not participating should consider enrolling at this time. You are eligible if you are: a faculty member carrying half the regular course load, or a staff member working 1,000 hours in a year.

Generally, your salary reduction (tax deferred) contributions are limited to the following amounts expressed as a percent of salary (net of any deferred compensation):

<table>
<thead>
<tr>
<th>Annual Earnings</th>
<th>Required Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $20,000</td>
<td>Waived</td>
</tr>
<tr>
<td>$22,500 but less than $25,000</td>
<td>2%</td>
</tr>
<tr>
<td>$25,000 but less than $27,500</td>
<td>3%</td>
</tr>
<tr>
<td>$27,500 but less than $30,000</td>
<td>4%</td>
</tr>
<tr>
<td>$30,000 and above</td>
<td>5%</td>
</tr>
</tbody>
</table>

Contributions for union employees are in accordance with the union contract.

Investment options

Current and past results of TIAA/CREF and Vanguard are detailed in your retirement annuity mailing. These amounts are based on past performance and in no way indicate or predict the future performance of these investments. The amounts are rounded to the nearest 1/100 of a percent. These amounts have not been audited or otherwise verified by the University.

All questions, change forms, applications and transfer forms should be directed to:

Hilltop Campus — Sylvia Fowles or Kevin Naasbaum, 889-5990, Box 1184, Medical Campus — Mary Walsh or Tricia Asbury, 362-4937 or 362-7024, Box 9002.

All requests for calculations must be received in the payroll office no later than April 30. All change forms and applications must be received in the appropriate benefits office no later than 5 p.m. May 31.

Personnel News

Personnel News appears monthly in the Record and is designed for the benefit of Washington University’s employees. Personnel News is determined in coordination with the Office of the Chancellor for personnel and affirmative action. It is designed to inform the University’s employees of the benefits and opportunities available at the University.
April 25 – May 4

LECTURES

Thursday, April 25

6 p.m. Department of Physics Seminar, "Scattering and the Reflectivity of a Clean Interface." Robert W. McMichael, prof, Department of Physics, University of Colorado, Boulder. Will hold in Mallinckrodt Center, 101 C. For more info., call 889-5581.

Friday, April 26

8 a.m. Department of Chemistry Seminar, "Carbon Dioxide: An Inert or Reactive Gas?" Robert W. McMichael, prof, Department of Chemistry, University of Colorado, Boulder. Will hold in Mallinckrodt Center, 101 C. For more info., call 889-5581.

5:30 p.m. Department of Physics Seminar, "Scattering and the Reflectivity of a Clean Interface." Robert W. McMichael, prof, Department of Physics, University of Colorado, Boulder. Will hold in Mallinckrodt Center, 101 C. For more info., call 889-5581.

Saturday, April 27

4 p.m. Department of Chemistry Seminar, "Carbon Dioxide: An Inert or Reactive Gas?" Robert W. McMichael, prof, Department of Chemistry, University of Colorado, Boulder. Will hold in Mallinckrodt Center, 101 C. For more info., call 889-5581.

Sunday, April 28

4 p.m. Department of Physics Seminar, "Scattering and the Reflectivity of a Clean Interface." Robert W. McMichael, prof, Department of Physics, University of Colorado, Boulder. Will hold in Mallinckrodt Center, 101 C. For more info., call 889-5581.

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April 26 - May 4

PERFORMANCES

April 26

10:00 a.m. Wednesday Morning Choral Concert with Oily Wilson, composer and director. University of Calif.-Berkeley. Wilson is a graduate student. Sheet music is $20. For tickets, call 889-5581.

10:00 a.m. "OVERTURE" Series Presents the Carl Tolman Lecture Series. "The Role of Low Molecular Weight Glycoproteins in the Ocular Anterior Segment." Erik Simons, prof, Department of Ophthalmology, University of Calif.-Berkeley. Tolman is a graduate student. The company will give young audiences a behind-the-scenes look at how a modern dance work is created. Event is sponsored by the College of Education, for info., call 889-5581.

Friday, April 26

8 p.m. Department of Music Presents Small Concert with Oily Wilson, composer and director. University of Calif.-Berkeley. Wilson is a graduate student. Sheet music is $20. For tickets, call 889-5581.

Saturday, April 27

8 p.m. Department of Music Presents Electronic Music Concert, directed by Richard O'Donnell. Students will receive free tickets. For more info., call 889-5581.

Sunday, April 28

1:30 p.m. Department of Music Presents a Senior Piano Recital. Directed by Janet Knickel. For more info., call 889-5581.

MISCELLANY

April 26

1 p.m. Phi Delta Theta/ALS Memorial Golf Tournament. Norvell Ford Country Club near St. Louis. Cost: $20 per person. For more info., call (314) 994-1760. Proceeds to benefit the ALS (Amyotrophic Lateral Sclerosis) - Lou Gehrig's Disease Association of Greater St. Louis. For more info, call Deek Sexton at 722-6212.

Friday, April 26

4:30 p.m. Wednesday Fellowship Presents the Annual Last Lecture. "Godard, Guth, Thies, WU." prof, Department of Chemistry, WU. For more info., call 889-5581.

Friday, May 3

9:30 a.m.-1:30 p.m. WU's Alzheimer's Disease Center Presents "Clinical Issues in Dementia," a continuing education credit conference. Find will discuss whether the Alzheimer's patient's condition will be treated the same as that of a healthy person. Cost: $10 for students, $20 for general registration, and $30 for professional (physician, nurse, social worker, attorney or general). Registration must be postmarked by April 29 to the Alzheimer's Association, 3537 Ohio Street Rd, St. Louis, MO 63110. For more info., call 523-3422.

EXHIBITIONS

April 26

"Roman Republican Coins." Through May 19. Gallery of Art, WU Museum of Art. Gallery hours: 10 a.m.-5 p.m. weekdays, 1:30-5 p.m. weekends. For more info., call 889-5581. Group admission: $3 for students; $6 for general. Included in the cost is a new gift shop benefitting the WU Museum. For more info., call 889-5581.

"OVERTURE" Series Presents the Carl Tolman Lecture Series. "The Role of Low Molecular Weight Glycoproteins in the Ocular Anterior Segment." Erik Simons, prof, Department of Ophthalmology, University of Calif.-Berkeley. Tolman is a graduate student. The company will give young audiences a behind-the-scenes look at how a modern dance work is created. Event is sponsored by the College of Education, for info., call 889-5581.

"The Alzheimers' Disease Program Recognizes the Bicentennial of the Death of Wolfgang Amadeus Mozart. On loan from the Austrian Cultural Institute of New York, the exhibit marks the 200th anniversary of the death of Wolfgang Amadeus Mozart. On loan from the Austrian Cultural Institute of New York, the exhibit will be on display through May 8. Exhibit hours: 10 a.m.-5 p.m. weekdays. For more info., call 889-5581.

"Core Exhibition." May 16-21. The Missouri State Fair. Admission is free. For more info., call 889-5581.

"FMA II Exhibition," April 27-May 5. Opening reception from 5 to 7 p.m. April 26. Gallery of Art, upper gallery, Steinberg Hall. Hours: 10 a.m.-5 p.m. weekdays, 1-5 p.m. weekends.

"Winning Collections of the Neuhartester Student Book Collection Competition," Through May 16. Special Collections, Olin Library. Lab. 55. Exhibit hours: 8:30 a.m.-5 p.m. weekdays.

"Mountain Bicentennial Exhibit," The exhibit marks the 200th anniversary of the death of Wolfgang Amadeus Mozart. On loan from the Austrian Cultural Institute of New York, the exhibit will be on display through May 8. Exhibit hours: 10 a.m.-5 p.m. weekdays. For more info., call 889-5581.

"Core Exhibitions." May 9-10. Baby Gallery, Babcock Hall. Hours: 1 p.m.-5 p.m., weekdays.


"Roman Republican Coins." Through May 19. Gallery of Art, WU Museum of Art. Gallery hours: 10 a.m.-5 p.m. weekdays, 1:30-5 p.m. weekends. For more info., call 889-5581. Group admission: $3 for students; $6 for general. Included in the cost is a new gift shop benefitting the WU Museum. For more info., call 889-5581.

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FILMS

April 26, Friday

7:00 p.m. Department of Music Presents a University City Symphony Orchestra Concert. Gates Hall, Steinberg Hall. Admission: free. For more info., call 889-5581.

Monday, April 29

8 p.m. Department of Music Presents Small Chamber Ensembles and Flute Choir Concert. Gates Hall, Steinberg Hall. Admission: free. For more info., call 889-5581.

Sports

April 26

3 p.m. WU vs. Harris-Stowe State College, Kelly Field.

Saturday, April 27

8 a.m. Men's and Women's Outdoor Track and Field. WU vs. Harris-Stowe State College, Kelly Field.

Sunday, April 28

8 p.m. Men's and Women's Outdoor Track and Field. WU vs. Mizzou. For more info., call 889-5581.

April 26 - May 4

MISCELLANY

April 26

1 p.m. Phi Delta Theta/ALS Memorial Golf Tournament. Norvell Ford Country Club near St. Louis. Cost: $20 per person. For more info., call (314) 994-1760. Proceeds to benefit the ALS (Amyotrophic Lateral Sclerosis) - Lou Gehrig's Disease Association of Greater St. Louis. For more info, call Deek Sexton at 722-6212.

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Operabo double bill to benefit shelters

The Department of Music will sponsor an opera double bill at 8 p.m. April 26 and 27 at the St. Louis Conservatory and Schools for the Arts, 560 Trinity Ave. Cost: $20. Proceeds will benefit the WU Invitational. For more info., call 889-5581.