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Cartoonist Peters is among speakers in Assembly Series

Palentologist Stephen Jay Gould, author of Wonderful Life: The Burgess Shale and the Nature of History (1989), will open the Fall 1990 Assembly Series at 11 a.m. on Sept. 5 in Graham Chapel. His talk is titled "On the Pattern of Life's History and the Improbability of Human Evolution." He was originally scheduled to speak Aug. 29.

Gould, the Alexander Agassiz Professor of Zoology at Harvard University, is the author of many books on evolution and scientific history. In 1983, he was named Margaret Mead Professor of Anthropology at the American Museum of Natural History.

The lecture series also will feature talks by Pulitzer Prize-winning political cartoonist Mike Peters; and a laundry room and a


The Assembly Series, now in its 31st year, offers free lectures to the University community and the public. Unless otherwise noted, all of the lectures are held at 11 a.m. on Wednesdays in Graham Chapel.

At 4 p.m. on Sept. 11, Illene Gay, Sterling Professor of History at Yale University, will discuss "Goethe's Life and Literary Style." The author of Freud: A Life for Our Times (1989), Gay will talk about the psychoanalyst to study cultural trends.

Eleanor Holmes Norton, chair of the Equal Employment Opportunity Commission under President Carter, will deliver the Sept. 19 Fall Honors Lecture. A professor of law at Georgetown University, she is an author of an affirmative action-comparable worth, and race and gender matters. Norton, who also served as a delegate to the 1990 Congress, is chair of the American Civil Liberties Union National Advisory Council and a regular commentator for National Public Radio.

Attorney Gibson Kamau Kuria, winner of the 1988 Robert F. Kennedy Human Rights Award, will speak at noon Friday, Sept. 21, in the east building of Big Bend and Wydown boulevards.

The 128,000 square-foot project located in the South-40 at the corner of Big Bend and Wydown boulevards consists of two five-story buildings that are connected by a ground floor corridor. The design of the complex is considered to be among the most advanced in the country.

These buildings will help to fill a major need for upperclass housing on the Hilltop Campus. Among speakers in the assembly series will be the director of housing and food service area. Secure storage areas for students' belongings are available in each building.

Each building has five levels of suites. The suites are designed for four students and come with either four bedrooms and a living room or two double bedrooms and a living room. Each suite has its own heating and ventilating system thermostat.

Among the nearly 2,600 students who moved into the University's residence halls this past weekend, some 300 juniors and seniors are settling in this week as the first tenants of the new $12.4 million residence hall complex called the Wydown House.

Experience theatre, dance, music and comedy

Edison series events range from international performing artists who will bring a range of classical and contemporary events to the stage. The season will feature an 11-event "OVATIONS!" series: a new program called "Stage Left" in the Mallinckrodt Center Drama Studio; and an expanded "ovations! for young people." "OVATIONS!" now in its third season, offers a diverse selection of world-renowned performing arts events to the general public.

The "OVATIONS!" 1990/91 season will open on Sept. 21 and 22 and will feature a two-night performance by LadyGourd Sangoma, four African-American female drummers breaking new ground in a predominantly male music form. The group members — Almondyia Best, Thye Girid, Pat Hall-Smith and Pam Patrick — are, by their own definition, "non-traditional lovers of traditional" music. Though primarily percussionists, the ensemble members also play half-baked standing tubes, bongo and beaded gourds to accompany their richly textured vocals.

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It's what mathematicians call an 'iterative process'.

Each fall for the past several years, Steven Krantz, Ph.D., professor of mathematics, has won the hearts of students who are more and more enthralled with the latest buzz word in mathematics: fractals.

"It hasn't gotten to the point yet where students want to major in fractals, but that could be right around the corner," Krantz says. "Pop science is fostering an awful lot of false notions about the real world of science and mathematics. The love affair with the fractal is disturbing to many mathematicians like myself who see too many people latching onto the notion that this stuff is serious mathematics."

Chances are your only brush with iterative mathematical functions comes April Fool's Day when you don't know a fractal from the TV kids' show "Fraggle Rock." So, what then, is a fractal and why is it so exciting to everyone?"}

The most commonly cited fractal geometry presented to the world the same visual forum that MTV gave to kaleidoscopically florid as a Haight-Ashbury shirt, and that's how the Mandelbrot set, sometimes called "the fractal gurus spew data out on a computer, then see what they came up with. This is entirely counter to the scientific method, which in mathematics is called the procedure. There are no proofs in fractal theory, just pretty pictures."

There is a noticeable lack of precise definitions in fractal geometry, as well as a dearth of theorems, Krantz contends.

There is no universally accepted definition of the term 'fractal'," he says. "One notable difference between fractal geometry and calculus, which revolutionized the world when Newton and Leibniz, time, is that fractal geometry has not solved any problems. It is not even clear that there are any new problems. The trouble with any subject that "is not in a practical sense. And, angered mathematics? Krantz doesn't think so, "because the fractal supporters are doing a great service to popularize science," Krantz says. "It is good that more people are becoming exposed to mathematics, but the ideas have to be put in perspective."

In fractal geometry, you use some mathematics to generate a picture, then ask questions about the picture, which generates more pictures, then you ask more questions about the new pictures, and so on. You rarely, if ever, return to the original mathematical. This process of not is far removed from taking a dozen monkeys with a dozen typewriters and eventually, if they live long enough, getting them to write Hamlet."

The fractal controversy really is part of a larger malaise that I see affecting higher education. The whole notion of the 'Quick Fix'. The fact that it brings its legitimate goals and often, deprivation, to become established in a discipline such as mathematics is disturbing. It is attractive to young people anymore. Everyone wants gratification now. I see fractal geometry as the 'Quick Fix' in mathematics. It's easy, flashy and, as far as I can see, pointless."

Tony Fitzpatrick

License plates stamped with logo are now offered
Washington University faculty, staff, students and alumni in Missouri are eligible for college license plates stamping the University's logo.

The plates, issued by the state of Missouri, carry a special gift to the University's "License to Learn" fund. A minimum of 450 gifts must be received before the Washington University plates will be authorized. All gifts will be returned if fewer than 450 apply.

This opportunity is offered as a service to Missouri University community who wish to show support of the University.

A brochure containing a special gift and "Emblem Use Authorization Statement" has been mailed to potential applicants.

Gifts must be received by Sept. 1, 1990. The validated authorization statement will be returned to each participant, and the state will apply your payment to the new plates.

For more information about the "License to Learn" fund, call the Office of Development, University of Missouri, Box 1190, Washington, MO 65108-1190 or call (314) 889-5919. For a brochure, call (314) 889-5919.

Performing Arts holds auditions Auditions for four performances of musical productions will be held from 7-11 p.m. Sept. 4 and 5. Two of the productions, the Fifth Column and "Flies in Her Ear," have large casts. The Fifth Column" and "Flies in Her Ear" will be performed Nov. 9-11 and 16-18.

The department also is auditioning actors for two one-act plays, "Danny and the Deep Blue Sea" and "Hello, Out There!" to be performed Nov. 22-23, Dec. 1 and 2.

All auditions will be held in the Mallinckrodt Center Drama Studio. For more information, call 889-5985.
Edison Theatre

jazz compositions. In addition to touring extensively, the group has performed at venues such as the National Cathedral in Washington, D.C., and has also been featured on national radio and television broadcasts.

The most recent concert was held on May 20 at the Kennedy Center, where the group was joined by the renowned pianist Leon Fleisher, who performed a solo piece written especially for him by Stephen Sondheim.

In recognition of their contributions to the arts, the group was presented with the 2009 Kennedy Center Honors Award by President Barack Obama. The ceremony took place on December 4 at the White House, where they were joined by other honorees including Stevie Wonder, Yo-Yo Ma, and Plácido Domingo.

On June 5, the group performed a special concert at the Lincoln Center in New York City, celebrating the 100th anniversary of the birth of the great composer Claude Debussy.

On August 11, they concluded their US tour with a sold-out performance at the famed Ravinia Festival in Highland Park, Illinois. The evening featured a program of works by Debussy, Ravel, and other composers.

The group will continue their international tour with performances in Japan, South Korea, and China before returning to the United States in early 2010. For more information, please visit EdisonTheatre.com.
Faulty gene

Researchers identify one cause for Sudden Infant Death Syndrome

Sudden infant death syndrome (SIDS) claims the lives of about 500 babies annually in the United States and has frustrated a 40-year effort to stop it. Now, researchers believe they have evidence of one cause for SIDS is in, and it implicates a flaw in how genetic instructions are decoded.

Researchers believe the misinterpreitation results in a faulty enzyme that can’t do its job of converting fatty acids into energy. Raw materials subsequently build up to toxic levels and, too often, an affected infant succumbs to a combination of fuel starvation and self-poisoning. Prevention of this form of SIDS may be as simple as insuring regular, frequent food intake. That keeps the body from needing fatty acids for fuel and sidesteps the genetic flaw.

Experts in the field agree that SIDS occurs as a result of a variety of causes, most of which remain mysterious. The flaw that results in the enzyme deficiency may be at the root of only 5 percent to 10 percent of the total number of deaths.

But in those cases, the problem is with “one of the three enzymes that catalyze the first step in turning fatty acids into fuel for energy,” explains Arnold W. Strauss, M.D., of the School of Medicine. “Ten years ago, a Danish group recognized a deficient enzyme — called MCAD — in some cases of SIDS,” he says. Research at Yale later tracked the gene responsible for the enzyme to its location on chromosome 11. Now, Strauss’ lab has cloned the gene, determined its precise composition and clarified its link to fatty acid metabolism.

In less severe cases, infants sometimes arrive at emergency rooms with symptoms like those of Rey’s syndrome: low blood sugar, liver failure and vomiting.

Strauss, a professor of pediatrics and biochemistry, proposes this scenario for MCAD-deficient SIDS. Usually babies producing a faulty enzyme do fine. They get their energy from glucose and glycogen, and the deficiency remains silent. But, if for some reason — illness, simple colic or pure accident — an affected infant doesn’t eat for about 15 hours, trouble occurs.

“That’s the threshold,” Strauss says. He explains that sugars provide the biggest energy users: the heart, the brain and the liver. The lack of enough fuel alone is problematic. William J. Kelly, M.D., an instructor of medicine at Washington University and one of Strauss’ collaborators. When a child is identified as MCAD-deficient, family members are screened, but Kelly and Strauss would prefer a screening test that is more readily available. That will require uncovering the precise genetic mechanism by which the faulty enzyme occurs.

How to do it? That mechanism is complicated and elusive. The gene that codes for MCAD does not appear to be the culprit in this case. “In many inherited enzyme deficiencies,” says Strauss, “the gene stops the protein’s production early. The resulting unstable protein degrades before it can work. Here, the problem is something else. The gene in deficient patients and in normal controls appears to be identical.”

So far, the investigators have traced the trouble to the process by which precursor RNA is “spliced” to become messenger RNA. The procedure, simply put, goes like this: The gene, made up of informational units, or exons, within the DNA molecule is copied first into precursor RNA via a process called transcription. Most genetic flaws occur in the gene and are passed along into the first copy. The precursor RNA is then “spliced.” In this step, only the informational bits are preserved; non-instructive elements (introns) are eliminated. The result is a more compact version of the recipe for a protein, called messenger RNA.

Finally, the messenger RNA leaves the nucleus with the instructions for making the protein. In this case, the protein is MCAD.

By working backward from MCAD to RNA to precursor RNA to messenger RNA and then to its normal precursor RNA, the researchers have found the focus of the problem. The deficiency that Strauss reports occurs as a result of one or a combination of 15 different

poisonous effect on the infant’s system. Strauss says, “The elements are highly favorable for the development of SIDS, if you inject carnitine bound to a fatty acid into a heart muscle, it stops immediately.” Strauss presented his theory at the international symposium, Human Inherited Defects in Biological Research, held in late April in Denmark.

In less severe cases, infants sometimes arrive at emergency rooms with symptoms like those of Rey’s syndrome: low blood sugar, liver failure and vomiting. A quick, inaccurate dose of sugar, Strauss says, is the medicine they need. Terrifying for parents, such a non-lethal event might actually be a blessing in disguise because the infant survives and matures. Further trouble can be avoided by guaranteeing regular food intake or, at worst, an intravenous sugar when the child can’t eat, Strauss says.

Mechanism elusive

Otherwise, identifying the syndrome is problematic. William J. Kelly, M.D., a professor of pediatrics at the University of Iowa College of Medicine, oversees one of only about five laboratories in the nation prepared to isolate MCAD deficiency. It’s a time-consuming, painstaking procedure,” he says, “not a candidate for broad-based neonatal screening at this time, though that would be nice.”

“MCAD deficiency occurs in about one of every 5,000 children, so it’s not uncommon, says Daniel P. Kelly, M.D., an instructor of medicine at Washington University and one of Strauss’ collaborators. When a child is identified as MCAD-deficient, family members are screened, but Kelly and Strauss would prefer a screening test that is more readily available. That will require uncovering the precise genetic mechanism by which the faulty enzyme occurs.

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problems in splicing. The instructions get confused, and the product is “a mess,” Strauss says.

New class of disorders

For the moment, MCAD deficiency stands as the lone example of what may be a new order of genetic disorders — those attributable not to the genes themselves but to the splicing process that is still poorly understood, though undoubtedly controlled by other genes. Kelly also points out that though there is clearly a splicing problem involved, something about this gene also predisposes it to splicing trouble, because other protein recipes in MCAD-deficient patients are spliced properly.

The MCAD deficiency is the first of what will probably be many causes for the syndrome called SIDS.

The 15 splicing errors recorded have all been seen in the enzymes of one family: a Dutch father, the two children he lost to SIDS and two surviving siblings. Their cultured skin cells provide the raw material for much of the research. Each error produces a different form of the enzyme; the degree of their effectiveness varies with the severity of the flaw.

Arnold W. Strauss, M.D., holds one of his patients in the Pediatric Intensive Care Unit at St. Louis Children’s Hospital.

In about half of the altered proteins, the affected regions include that portion of the molecule called the transit peptide (proteins are strings of peptides), the element responsible for gaining passage through the membrane into the mitochondria where the enzyme works. Kelly says errors in the transit-peptide portion prevent the enzyme from working at all, because it can’t get to the job site. Splicing errors elsewhere only reduce the enzyme’s efficiency.

Current research is directed at finding the source of the splicing problem while also seeking other possible causes. Is there a gene flaw not yet found? Why is this gene misspliced when others in the same patient are copied precisely? The suggestion is that among the many proteins that operate in the splicing process must be at least one that is gene-specific. “But that’s a hunch on the frontiers of what we know,” Kelly acknowledges. Autopsies of infants claimed by the deficiency show fatty infiltrations of the liver and abnormal mitochondria (perhaps as a result of working with strangely configured enzymes), nothing more.

The MCAD deficiency is the first of what will probably be many causes for the syndrome called SIDS. Reid and Strauss agree. Reid, whose Ph.D. dissertation 15 years ago dealt with SIDS, lauds the MCAD research as “a model of how science can and should be carried out,” but adds, “except for this, we still don’t know much more now than we did two decades ago.”

Sara Kohler
The National Cancer Institute has awarded a radiologist at the School of Medicine a $400,000 grant to assess the diagnostic effectiveness of new imaging techniques in primary and recurrent colorectal cancer.

Dennis M. Balf, M.D., associate professor of radiology at the School of Medicine's Mallinckrodt Institute of Radiology, will lead a team of researchers to study methods of imaging colorectal cancer, we will be able to better determine the kind of treatment the patient will need.

Colorectal cancer is the most common cancer of the gastrointestinal tract, with approximately 140,000 new cases diagnosed annually. Balf, principal investigator for the St. Louis team of the multicenter study, is also investigating the spread of cancer from the colon to the liver, looking at the radiologic methods in staging the liver in colorectal cancers and evaluating the ability to do so accurately.

Other institutions conducting research in the multicenter study are New York University, New England Journal of Medicine, University of Michigan, Johns Hopkins University, and the University of Washington-Seattle.

Balf, known for his work in gastrointestinal radiology, has published more than 50 articles and contributed to more than 15 book chapters.

Unrestricted grant is awarded to Ophthalmology

The Department of Ophthalmology and Visual Sciences at the School of Medicine has received an unrestricted grant of $50,000 from Research to Prevent Blindness (RBP), a voluntary organization committed to the financial support of eye research.

The award was announced by Henry Kaplan, M.D., professor and head of the Department of Ophthalmology and Visual Sciences.

"The unrestricted grant is very important to us," says Kaplan. "For years, we have not been able to maintain personnel fully for the study of eye cancer and eye disorders." He noted that RBP is one of the few organizations that provides unrestricted funds.

Washington University has one of the world's largest research programs devoted to ophthalmology and visual science. The department is known for its expertise in retinal neurobiology and in the past year has been expanding the research faculty to develop centers of expertise in immuneology and molecular biology. Research projects include studies of glaucoma, retinal degeneration, crossed-eyes in children, amblyopia (impaired vision without disease of the eye), retina transplantation, and the usual manifestations of diabetes and retinopathy. During the past 20 years, the ophthalmology department has received $601,900 in RPB funds. RPB provides annual grants to 62 medical schools and is the world's leading voluntary organization in support of eye research.

"I'm cured," Janet Kiefhaber happily told reporters who recently interviewed and interviewed her and physician Robert P. Perrillo, M.D., about her battle with chronic hepatitis B.

All patients in the three-year-long study had tested positive for the hepatitis B virus. "Cure" was defined as the complete disappearance of virus from the blood. Patients in "remission" are those in whom the virus became inactive and symptoms disappeared. Tests of viral replication were made throughout the treatment period and at one, three and six months after treatment.

Those in the three-year-long study had tested positive for the hepatitis B virus at least six months before entering the study and suffered chronic liver disease. One fourth of the patients received six weeks of oral placebo followed by 16 weeks of five million units of interferon alfa-2b daily; one fourth received six weeks of placebo followed by 16 weeks of interferon alfa-2b in a dose of one million units daily; and the remaining patients did not receive any treatment.

Compared with the untreated group, a significant number of those who received five million units of interferon alfa-2b showed a lack of the replicating forms of hepatitis B virus. Disappearance of viral replication was observed in 36 percent of patients treated with prednisone and interferon alfa-2b in 57 percent of those treated with five million units of interferon alone; in 17 percent of those treated with one million units of interferon, and seven percent of the untreated control group. There was a clear trend for patients with mild abnormalities in their liver function tests to do better if they received prednisone as part of their treatment (44 percent remission versus 17 percent).

In addition, more than 60 percent of patients taking the larger dose showed a significant improvement in liver disease as measured by liver biopsy. Of those who achieved a remission with treatment, approximately 30 percent lost all evidence of the infection in the blood and were considered cured.

"If you've had your hepatitis less than two years, your chances of getting rid of the disease are much better," Perrillo says. "We believe this indicates that early in the infection the virus does not integrate its genetic material into the host cell genetic material. But if enough time goes by, it does, at which point total eradication of the virus may be impossible."

The study reports fatigue as the most common side effect associated with interferon therapy. Other flu-like symptoms that occurred included fever, headache and muscle pain, but these improved as therapy continued. At this time, interferon is not federally licensed to be used in the treatment of hepatitis. Perrillo says the encouraging study results may hasten federal approval.

"We have made a significant step, but long-term follow-up will be necessary to determine the frequency of disease relapse and long-range benefits," Perrillo says. "I think we can feel confident in telling patients that they can get control of their disease with interferon therapy is about 50 percent overall."

For Kiefhaber, the research has cured her of a disease that was slowly killing her. She is now back at work as a nurse and has been vaccinated to prevent a recurrence of hepatitis.

The research was supported, in part, by grants from the Public Health Service and the National Institutes of Health. Interferon was provided by Schering-Plough Corp., New Jersey.

"Street party will kick off no-smoking policy"

Medical center employees and staff are invited to a lunchtime street party Sept. 10 to celebrate the first day of the medical center’s smoke-free policy.

The Breath Easy Celebration will be held from 11 a.m. to 2 p.m. on Audubon Avenue in front of the Clinical Sciences Research Building. The party is open to employees at the School of Medicine, Barnes, Jewish and St. Louis Children’s hospitals.

There will be free food, games, prizes and T-shirts, along with a dunking booth and other entertaining and informational activities. Aerobic dancers from the Maryland Fitness Center will perform, and several local and radio personalities will participate in various activities.

We are celebrating the culmination of the joint efforts of the medical center institutions to provide a smoke-free environment for employees and patients,” says Carol Moser, member of the medical center’s smoke-free committee, which organized the event.

In conjunction with the new smoking policy, which prohibits smoking in medical center buildings, on-site smoking cessation classes are being offered. Two classes are running now and others will be held as needed. Designated outside smoking areas at the School of Medicine will be available.

For more information about smoking cessation classes or location of designated smoking areas, contact Carole Moser, 362-6824.
Robins named honorary fellow of Royal College

Psychiatric epidemiologist Lee N. Robins, Ph.D., of the School of Medicine, has been named an honorary fellow of the Royal College of Physicians.

Robins was among five scientists worldwide to receive the honor at the Royal College’s Annual General Meeting in England last month. It is the highest honor given by the Royal College, the agency authorized to certify psychiatrists in the United Kingdom and publish the British Journal of Psychiatry.


Personality, a longitudinal study published in 1974, which created a model for more recent research.

Much of Robins’ work has centered on the effects of drug use, alcoholism and other familial disorders on child development. Most recently, her work has dealt with Vietnam veterans and the epidemiology of adult psychiatric disorders; she also developed the DIS (Diagnostic Interview Schedule), a tool for diagnosing specific mental disorders in large populations.

Robins directs a training program in psychiatric epidemiology and biostatistics and is an editorial board of numerous professional publications, including Social Psychiatry, Journal of Child Psychology and Psychiatry, Psychological Medicine and the American Journal of Public Health. She is editor for North America of a new journal, Methods in Psychiatric Research. In addition, she is a fellow of the American Psychopathological Association, the Institute of Medicine and the American College of Epidemiology.

Robins came to Washington University in 1954. She received her undergraduate education at Radcliffe College and her Ph.D. in Harvard University and Radcliffe.

Scholarship fund set up in memory of instructor’s child

Christine Feeley, Ph.D., instructor of occupational therapy in the School of Medicine’s Program in Occupational Therapy, and her husband, Kevin, have set up a student scholarship fund in memory of their son, who died in June.

Six-year-old Brendan Feeley was killed when a tree limb fell on a parked van where he was seated. He was on his way to a music camp.

The memorial, The Brendan Feeley Minority Students Scholarship, Program in Occupational Therapy, 6066, 4567 Scott Ave. St. Louis 63110.

Arthritis exercise classes benefit inner-city residents

Odessa Delfers has complained of being a little stiff lately, but she fights it off by picking up the PACE. Every Monday and Friday morning, Delfers and nine other men and women gather in the housing authority of the St. Louis Housing Authority, where Delfers resides.

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Researchers still need volunteers for prostate disease study

Researchers are still seeking men over the age of 55 who have a history of prostate cancer for a promising study.

Catalona and his team found a new blood screening test for prostate disease. Currently, 3,500 volunteers are participating in the project, an additional 3,500 are needed.

The study is being conducted at Barnes Hospital, Jewish Hospital and the School of Medicine. It is directed by William J. Catalona, M.D., chief of the Division of Urologic Surgery. Funding is provided by Hybritech, Inc., of San Diego.

The blood test, which examines the level of prostate specific antigen, may be the most promising screening test yet developed for prostate cancer, Catalona said. Normally all males have a low level of prostate specific antigen, he explains. This antigen protein is formed in the prostate gland and may become mildly elevated in men who have benign enlargement of the prostate gland, a primary infection of the gland or chronic inflammation of the gland. Elevated levels also may be present in early stage prostate cancer.

In 1989, prostate cancer surpassed lung cancer as the most common cancer diagnosed in American men over 50. Unfortunately, by the time the diagnosis is made, more than one-third of men have advanced cancer, according to Catalona.

"The blood test now appears to be potentially the best screening tool for detecting early prostate cancer at an early stage, when the results of treatment are more favorable," he comments. "If this study demonstrates that the test is useful, society will realize substantial savings." For the study, Catalona needs males aged 55-75 who have no diagnosis of prostate cancer. Participants will have approximately one-half ounce of blood drawn from an arm vein every six months for five years. The blood test will be performed free of charge. Participants also will be required to fill out a brief, yearly questionnaire asking whether a diagnosis of prostate cancer has been made since the last blood test.

Participants whose antigen levels are elevated will be advised to undergo a rectal examination and an ultrasound scan of the prostate gland. If any abnormalities are found on either of these examinations, the patients will be advised to undergo a needle biopsy of the prostate gland.

"There is an urgent need for earlier detection of prostate cancer," Catalona comments. "Earlier detection would lower the cure rate and improve the quality of life for patients with prostate cancer."

For more information, call Barnes Hospital Physician Referral, 362-8677.
The annual open enrollment for health insurance will be conducted in October. During the open enrollment period, you may enroll in or change your Washington University health insurance without coverage interruption. If you are not participating under one of the University’s health insurance plans, you may enroll during the open enrollment period.

The following rules apply if enrollment for health insurance is for the first time. You may enroll in one of the Health Maintenance Organizations (HMO’s), Partners or Group Health Plan. You also may enroll in the new major medical plan. Both the HMO’s and the major medical plan will begin coverage effective Oct. 1, 1990.

However, to enroll in Blue Cross-Blue Shield, you must have a college or skilled and experienced individual to mentor in the development office.

To serve as director of Annual Giving for all Washington University campuses.

We also will be introducing a new Blue Cross-Blue Shield plan called EXCEL. We will continue to offer the current plan, which is now called Blue Cross-Blue Shield.

The following hours are in effect:
- Main Office: Monday through Friday, 8:30 a.m.-5 p.m.; Saturday, 10 a.m.-4 p.m.; Sunday, 2-5 p.m. Hours to be extended in October, November, December, February, March and April.
- Intramural Office: Monday through Friday, 9 a.m.-6 p.m.; Tao Tennis Office: Monday through Sunday, 7 a.m.-9 p.m.; Equipment Room: Monday through Sunday, open regular building hours.
- Busbyhead Track: Monday through Sunday, 7 a.m.-Dusk.
- Millstone Pool: (for recreational swim) Monday through Friday, 7-8:30 a.m., *11:30 a.m.-1:15 p.m., 7-9 p.m.; Saturday and Sunday, 2-5 p.m. *Hours to be extended in October, November, December, February, March and April.
- Gimm Rachracht/Handball/Squash courts: Monday through Friday, 7 a.m.-9:45 a.m.; Saturday, 10 a.m.-4 p.m.; Sunday, noon-8:45 p.m.; and
- Interco Fitness Center (weight room): Monday through Friday, 7 a.m.-9 p.m.; Saturday, 10 a.m.-8 p.m.; Sunday, noon-8 p.m.

Activity areas close 15 minutes before the Athletic Complex closes. Facilities are available for recreation when not scheduled for departmental programs.

Hours during University holidays, semester breaks, final exams and the summer will be adjusted and posted at the entrance of the Athletic Complex.

**From swimming to squash**

**Athletic Complex offers recreational variety to students, faculty and staff**

Washington University students, faculty and staff with valid I.D.s are eligible to use the Hot Line office. Full-time day school students, faculty and staff, as well as professors emeriti and retired staff, are not charged for this privilege. Other eligible users such as families of faculty and staff, part-time students, spouses of day school students, evening school students and alumni must purchase a membership card.

Faculty, staff and full-time day school students are eligible to purchase family memberships for immediate family members such as a spouse or children residing at the same address. The family membership fee is $45 for the first family member and $5 for each additional member.

Membership cards must be obtained for each eligible family member. I.D. cards, Social Security numbers and proof of age and residence for spouses and children must be presented at the membership office before family memberships are sold. Membership cards must be presented for admission to the Athletic Complex.

Children under 14 may use the facilities provided they are accompanied and supervised by a parent or legal guardian or are enrolled in a departmental program.

University students, faculty and staff are permitted at designated times to bring one guest per day to the Athletic Complex. The sponsor must accompany the guest and is responsible for the guest’s conduct. A guest pass, valid for one visit, is required. The fee is $5. Guest passes may be purchased from 8:30 a.m. to 4:30 p.m., Monday through Friday, at the athletic department’s main office or at the medical school Garber’s Office from 9 a.m. to 4 p.m., Monday through Friday. In order to purchase a guest pass, you must have a valid University I.D. card.

The following hours are in effect during the academic year. Hours are subject to change. For more information on scheduled activities or building hours call the 24-hour information hot line at 889-4705.

**Athletic Complex**

**Monday through Friday, 6:45 a.m.-10 p.m.**
**Saturday, 10 a.m.-9 p.m.**
**Sunday, noon-8 p.m.**

**Main Office**

**Monday through Friday, 8:30 a.m.-5 p.m.**

**Intramural Office**

**Monday through Friday, 9 a.m.-6 p.m.**

**Tao Tennis Office**

**Monday through Sunday, 7 a.m.-9 p.m.**

**Equipment Room**

**Monday through Sunday, open regular building hours.**
Alcoholic veterans are focus of study

The use of physical and mental health services by some 15,000 alcoholic veterans is being studied to determine whether counseling and treatment programs for alcoholic veterans who completed a Department of Veterans Affairs (VA) alcohol treatment program reduces the need for health care. Cynthia Cook, Ph.D., an assistant professor at the George Warren Brown School of Social Work, is co-principal investigator of the study. The National Institute on Alcohol Abuse and Alcoholism has awarded funding to this VA study at $505,000 for two and one-half years.

Washington University faculty and staff members have received recognition for their scholarly activities, research and general expertise.

Metzidakis named Summer School director

Stamos Metzidakis, Ph.D., associate professor of chemistry, has been appointed director of the University's Summer School, effective Sept. 1. He succeeds Ronald C. Freiwald, Ph.D., associate professor of mathematics, who has served as director since Summer 1985. Metzidakis, whose academic specialties include (0) Greek, Byzantine and modern critical theory, will continue his teaching responsibilities in the Department of Romance Languages and Literatures on a part-time basis.

Metzidakis received his bachelor's degree from the University of Athens in 1974 and a master's degree from the University of Michigan in 1976. He earned his doctorate in 1982 from Columbia University. He also attended the University of Paris, where he studied extensively as an undergraduate and graduate student.
Philip H. Dyvig

there from 1985-87. She became chief working at Jewish Hospital in 1984 as hospital's emergency department in Stadium's first aid station, began

ents of students who become sick or inpatient care at the infirmary. health services at the general clinic, include outpatient care and supporting

employee health service director, she oversees provision of appropriate treatment for staff working in high risk areas, and provides medical treatment for staff with needlestick injuries and injuries to animals. All other on-the-job injuries are seen through Barnes Emergency Room or through the University's worker's compensation physicians.

as an intern in the Department of Internal Medicine. She was a resident there from 1985-86. She served as chief resident in 1987 and assumed her position as attending physician in the hospital's emergency department in	

New medical campus

New medical campus

A member of the A Association of Communications. He also has worked

Council for Advancement and Support of Education, has a bachelor's degree in English and biological anthropology from Notre Dame College and a master's degree in science journalism from Marquette University.
National attention: In a photo that ran in the June 17 issue of The New York Times, Kenneth F. Kelton, center, Ph.D., associate professor of physics, at the University of Wyoming, looks on during ceremonies honoring Calvin G. Fryxell, right. According to Sarah Elgin, Ph.D., professor of biology and partnership head, the idea is to promote science education by giving University City teachers access to scientific and other resource people in the University community.

Smoke-free policy at MU tops summer news

The establishment of a smoke-free environment at the Washington University Medical Center and the retirement of several high-ranking officials were among the news events announced during the summer. Below is a recap of the major news stories that appeared in the June, July and early August issues of the Record.

• The School of Medicine is joining Barnes, Jewish and Children's hospitals in instituting a policy that will provide a smoke-free environment throughout the Washington University Medical Center, effective Sept. 10. In conjunction with the new smoking policy, on-site smoking cessation classes are being offered.

• In another development related to smoking cessation, the University's Center for Health Behavior Research received a grant totaling $1 million to develop a neighborhood-run smoking cessation network in a predominantly black community in St. Louis. The grant, awarded by the National Heart, Lung and Blood Institute, will provide $570,000 a year for three years to fund a collaborative project between the University, Grace Hill Neighborhood Services and the Missouri Department of Health. The center's director, Edwin B. Fisher, Ph.D., associate professor of psychology, is directing the program.

• Herbert F. Hitzeman Jr., senior vice chancellor for university relations, Joe F. Evans, associate vice chancellor for business affairs, and Mary L. Parker, M.D., head of the Student Health and Service and associate professor of medicine and preventive medicine, all retired June 30 after serving Washington a combined total of 94 years. Meanwhile, Ronald G. Evans, M.D., director of the Mallinckrodt Institute of Radiology at the medical school and former vice chancellor for financial affairs, returned to full-time duties at the institute.

To mark Hitzeman's distinguished career here, the University has named the former "G" residence hall after him. Chancellor William H. Danforth announced the naming of the hall during a June 1 dinner retirement celebration honoring Hitzeman's 24 years of service to the University. Referring to Hitzeman, Danforth said, "Under his direction, the University not only successfully completed three major campaigns, but also all areas of alumni, development and public relations have shown extraordinary improvement. The results of his work will benefit generations of students. I think it highly fitting that Herbert Hitzeman's name appears on a building that houses our students." Hitzeman is a 1953 graduate of Washington University.

• Viktor Hamburger, Ph.D., Edward Mallinckrodt Distinguished Professor emeritus of biology, received the 1990 Karl Spencer Lashley Award from the American Philosophical Society in Philadelphia, the nation's first learned society that traces its roots to the philosopher, inventor and statesman Benjamin Franklin.

• Two new members have been elected to the Board of Trustees. Thomas H. Jacobsen, chairman, president and chief executive officer of Mercantile Bancorporation Inc. and Mercantile Bank of St. Louis N.A., and Edward W. Whitacre Jr., chairman and chief executive officer of Southwest-Bell Corp. Both are elected to four-year terms.

• A memorial service was held June 17 in Graham Chapel for Thomas Steele Hall, Ph.D., a former dean of the College of Liberal Arts at Washington and a longtime professor of biology here. Hall died June 12 after suffering a heart attack at Barnes Hospital. He was 81.

• Former Surgeon General C. Everett Koop visited the School of Medicine in late June to talk with experts on aging for an upcoming television program on health care in America. One hour of the five-hour series, scheduled to air on NBC in December, will be devoted to issues on aging.

• Several University officials have been appointed, Thomas A. Harp, director of purchasing and general services, has been named acting associate vice chancellor for business affairs, succeeding Joe Evans. Lee E. Hanson, director of development services, has received the additional title of associate vice chancellor. At the School of Medicine, Glenda K. Winman, executive director of the Office of Medical Public Affairs, has been named assistant dean for special programs.

• In other appointment news, Carl D. Rhodes Jr., Ph.D., formerly an associate dean at the University of Texas Southwestern Medical Center in Dallas, has been named associate dean for graduate studies at the School of Medicine and associate dean in the Graduate School of Arts and Sciences. Rhodes was affiliated with the School of Medicine from 1983-88.

In addition, Dana Wilson Klar, a former legal assistant with the U.S. Indian Health Service, has been appointed director of the new Center for American Indian Studies in Social Services at the George Warren Brown School of Social Work.

• At the request of the International Atomic Energy Agency (IAEA) and the government of the Soviet Union, Henry D. Royal, M.D., associate professor of radiology and associate director of nuclear medicine at the Mallinckrodt Institute of Radiology, has been asked to perform an in-depth study of illnesses that have been attributed to the April 1986 explosion of a nuclear reactor in Chernobyl.

• Royal, an internationally re-nowned expert in radiation exposure, is one of two physicians from the United States who is serving on the IAEA's medical effects team. In May the team reviewed the data regarding the effects of the nuclear accident already collected by Soviet scientists. In the fall the team will perform its own health survey, examining the people from contaminated and non-contaminated villages to determine the incidence of thyroid disease, anemia and other potential radiation-related illnesses.

• Nancy J. Jones, J.S.D., professor of law, has been appointed the Charles Nagel Professor of International Comparative Law at the University.

• Patty Jo Watson, Ph.D., professor of psychology, recently received the Fryxell Medal for 1990 from the Smithsonian National American Archival Association for her "...outstanding scientific contributions to understanding the human past in the Americas." The award, which carries a certificate and a medal, was presented to Watson at the society's annual meeting.

• William K. Y. Tao, retired chairman of the board and co-founder of Alcon Laboratories Inc., M.D., professor of radiology and neurological surgery, was awarded the Grass Prize by the Society of Neuro-logical Surgeons. The society honors neurosurgeons for their long-term commitments and outstanding contributions to research in neurological surgery.

As the recipient of the culpeper scholarship, Otto H. Hill, M.D., assistant professor in pediatrics and pathology, will receive $100,000 a year for three years for research focusing on the interactions of the immune system with blood cells and the complement system, which forms part of the body's immune-defense system.

• St. Louis high school students Sue Sowinski, Jordan Daniels and Laura Thomas spent 10 weeks of their summer vacation working in laboratories at the School of Medicine as part of the first National Kidney Foundation Science Scholars. Under the tutelage of medical school researchers, the students honed a pre-existing interest in research and medicine by overecn-}
Men's soccer Bears face another tough schedule

Last year, the men's soccer team finished the season with nine straight wins, a share of the University Athletic Association (UAA) title and an impressive 15-4-0 season record. Unfortunately, the season record and accomplishments were not convincing enough for the NCAA selection committee which left out the Bears, one of the NCAA's most successful postseason teams.

Well, it is a new year, and this season the UAA champion receives an automatic bid to the NCAA Division III Tournament. However, head coach Ty Kersten doesn't want to focus entirely on the conference games.

"I tend to be more pragmatic when it comes to season goals," says the fourth-year mentor. "I want to go out each game with the idea in mind that we're-going to improve upon our last performance and continue to get better with each game as the season goes along. That's all really I want from my team. I've never been one to dwell on the past. We've got to move on and win all our conference games — you get ahead of yourself that way. At the end of the season, if you do qualify or are chosen for the tournament, we don't want to be disappointed. Just making the tournament — we want to win it."

"We did make improvements in the 1990 season with a strong team feeling and unity. But we also finished off with a real disappointment — not getting the NCAA bid. So that's a good motivating tool for us this season. We think the returning players didn't feel they didn't get the fair shake and we'll be out to prove themselves this season."

Washington University has a significant number of returning starters — seven — which could lead to big things in 1990. However, like most seasons, there are some major questions the Bears must answer as the season progresses.

First, the Bears must replace their three-time All-America goalkeeper Chris Scaglione who started in goal for four consecutive seasons. Waiting in the wings are Jeff Puszynski and Alex Vernshen — two seniors who will get one last shot at playing goalkeeper this fall.

Second, the Bears face another ambitious slate. The NCAA Division III postseason teams dot the 1990 schedule, with two of the five tourney teams coming from the UAA.

"Just because you have a large number of players returning doesn't mean you're going to have a good season," Kersten stressed. "As resolved as our players are to show they were short-charged last year, and as good a group and team we have, you won't wonder, at least initially, how much they realize that amount of work it took to have the type of season we did last year.

" Obviously, we're going to miss Chris Scaglione. The goalkeepers position will be one of the first things we address this season. We're also emphasizing to our players how the game will change with the new substitution rule. (Once a player has left the game, he cannot return until the next half or over time.) Most likely, players will not get the amount of playing time they did in the past, which will create a more competitive environment during practices."

The Bears' top returning players include forward Paul Wright, a two-time All-Midwest and All-UAA pick. Wright, a senior, finished last season with 11 goals and seven assists, and currently ties for fourth on the Bears' all-time assist list with 22.

MEN'S SOCCER SCHEDULE

<table>
<thead>
<tr>
<th>DATE</th>
<th>OPPONENT</th>
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<tr>
<td>Sat., Aug. 18</td>
<td>ALUMN alumni</td>
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<td>Mon., Aug. 20</td>
<td>PVIU College</td>
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<td>Sun., Aug. 25</td>
<td>Western Michigan</td>
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<td>Fri., Sept. 10</td>
<td>Ohio Wesleyan Tournament</td>
<td>HOME</td>
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<td>Sat., Sept. 11</td>
<td>Rhodes College</td>
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<td>Sat., Sept. 12</td>
<td>Western Michigan</td>
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<td>Sat., Sept. 15</td>
<td>University of Rochester</td>
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<td>Sat., Oct. 6</td>
<td>Emory University</td>
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<td>Tue., Oct. 9</td>
<td>University of Missouri-St. Louis</td>
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<td>Sat., Oct. 13</td>
<td>Carnegie Mellon University</td>
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<td>Wed., Oct. 17</td>
<td>MacMurry College</td>
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<td>Fri., Oct. 26</td>
<td>Case Western Reserve University</td>
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<td>Sat., Oct. 30</td>
<td>Emory University</td>
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CENTENNIAL FOOTBALL SCHEDULE

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<tr>
<td>Thu., Sept. 1</td>
<td>Central Methodist College</td>
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<td>Sat., Aug. 11</td>
<td>New York University</td>
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<td>University of Michigan</td>
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<td>Tue., Oct. 9</td>
<td>University of Kentucky</td>
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<td>Fri., Oct. 12</td>
<td>University of Rochester</td>
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<td>Sat., Oct. 20</td>
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<td>Nov. 3</td>
<td>University of Chicago</td>
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University Athletic Association contest.

Homecoming and official Centennial celebration.
**CALENDAR**

Aug. 30-Sept. 8

**LECTURES**

Thursday, Aug. 30

Noon, Dept. of Surgery Transplant Seminar. "Cytokine-Endothelial Development and Regulation at the Late Pre-Effector Stage." Brian Susanek, assoc. professor of surgery, microbiology and immunology, Medical College of Virginia, Virginia Commonwealth University.

Room 723E, Biological Sciences Research Bldg.

Wednesday, Sept. 5


4 p.m., Dept. of Physics Colloquium. "Quantum Electrical Engineering. The Quantum Mechanics of Submicron Electronics." Yaotian Fu, prof. of physics, Room 204 Cow Hall. (Coffee will be served at 2:30 p.m. in Room 247 Copeland Hall.) For more info., call 889-6275.

Thursday, Sept. 6

4 p.m., Dept. of Chemistry Seminar by Ulisse Schroeder, chemist dep. of Rochester. Room 311 McMillen. For info., call 889-6300.

**MUSIC**

Thursday, Aug. 30

21-22 of 40. WU Mixed Choir and Vocal Jazz Group Auditions. 10 WUer. For more info., call 889-5981.

7-5 p.m., WU Chamber Choir Auditions. 8 WUer. For more info., call 889-5981.

Sunday, Sept. 2

1-3:30 p.m., WU Wind Ensemble Auditions. Thomas Beethoven, Yui. For more info., for more info., call 889-5981.

Tuesday, Sept. 4

7-7:30 p.m., WU Chamber Music Ensemble Auditions 3 WUer. For more info., call 889-5981.

7-10:30 p.m., WU Jazz Band Auditions. "The Perfect Rehearsal Hall." To make an appoint- ment for or for more info., call 889-5981.

**EXHIBITIONS**

"Bookends: Artists' Explorations of Form and Content," including "artist's books" by John Williams, painter and local artist Leda Davi. (An opening reception for this and other two shows will be held Sept. 4, 3-5 p.m. Sept. 5, 1-5 p.m. at the Gallery of Art. New York-based artist and loans show will give a lecture at the opening.) Gallery of Art, Steinberg Hall, upper gallery. Through Oct. 1. For more info., call 889-4523.

Tuesdays through Fridays (will be open on weekends). For more info., call 889-4523.

"Modern Fine Printing: The Black Art," features books published over the last century that show examples of fine printing. Through Dec. 2. 10 a.m.-5 p.m. Tuesdays through Fridays; 1-5 p.m. weekends. The gallery is closed Sept. 1 and 2. For more info., call 889-4469.

**PHOTOGRAPHY**

Saturday, Sept. 1

7 p.m., Women's Volleyball. WU vs. St. Louis U. Field House Gym.

Friday, Sept. 7

8 p.m., Women's Volleyball. WU vs. McKendree College. Field House Gym.

Saturday, Sept. 8


5 p.m., Women's Volleyball. WU vs. Quadrango- lin. WU vs. McKendree College. Field House Gym.

Saturday, Sept. 8

"Observations," a black and white photograph by Jennifer Cohen. In one of 20 objects in an exhibit at Baby Gallery. The exhibit, which features work by three new faculty members — Cohen, painter Martin Ball and graphic designer Barbara Bendl-Markstein — runs through Sept. 25. Baby Gallery is in Baby Hall. Gallery hours are 1-5 p.m. weekdays and 1-5 p.m. weekends. The gallery will be closed Sept. 1-3 for Labor Day.

**FILMS**

September 4

"Modern Fine Printing: The Black Art." Features books published over the last century that show examples of fine printing. Through Dec. 2. 10 a.m.-5 p.m. Tuesdays through Fridays; 1-5 p.m. weekends. The gallery is closed Sept. 1 and 2. For more info., call 889-4469.

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**SPORTS**

Saturday, Sept. 1

7 p.m., Women's Volleyball. WU vs. St. Louis U. Field House Gym.

Friday, Sept. 7

8 p.m., Women's Volleyball. WU vs. Quadrangolin. WU vs. McKendree College. Field House Gym.

Saturday, Sept. 8


5 p.m., Women's Volleyball. WU vs. Quadrangolin. WU vs. McKendree College. Field House Gym.

**MISCELLANY**

**Assembly Series — continued from p. 1**

Prizes. His editorial cartoons are syndicated in more than 500 newspa- pers and are also featured in animated form under the name "Peters Post- scripts" on "NBC Nightly News." A Washington alumnus, Peters will be grand marshal of this year's Homecoming parade. In addition to his editorial cartoons, he also draws a comic strip titled "Mother Goose and Grimm." The strip chronicles the adventures of bad-boy Grimm, a dog and a befuddled Mother Goose.

Thomas Lovejoy, assistant secretary for external affairs at the Smithsonian Institution, will speak Oct. 10 in May Auditorium. An environmentalist, Lovejoy originated the debt-for-nature swaps, which have helped several Third-World countries reduce their debt in exchange for preserving land.

Hemingsway scholar Michael Reynolds will deliver the keynote lecture Oct. 17 in Edison Theatre for "Ernest Hemingsway: The Man and the Myth," a four-day conference to be held Oct. 17-20 at Washington Univer- sity. This conference will address the Hemingsway mystique.

An editorial board member of the Hemingsway Review, Reynolds has written six books and numerous articles on Hemingsway, including "Hemingsway: The Fours Parts" (1989). Reynolds held a position of graduate studies in the English department at North Carolina State University, received a Pulitzer-prime narration for his 1986 biography, "The Young Hemingsway."

Washington alumnus Harold Rams will speak at 11 a.m. on Oct. 24. Rams, a film director, screenwriter and actor, first gained national recognition as co-author of "Animal House," the 1978 John Belushi blockbuster film. Since then he has directed and co-written several popular films, including "Back to School," and was one of the stars of the film "Ghost- busters."

Emmy Award nominee and actress Ruby Dee will perform as the black Arts and Sciences Festival/