

Washington University School of Medicine

Digital Commons@Becker

Washington University Record

Washington University Publications

10-16-2008

Washington University Record, October 16, 2008

Follow this and additional works at: <https://digitalcommons.wustl.edu/record>

Recommended Citation

Washington University Record, October 16, 2008. Bernard Becker Medical Library Archives.
<https://digitalcommons.wustl.edu/record/1156>.

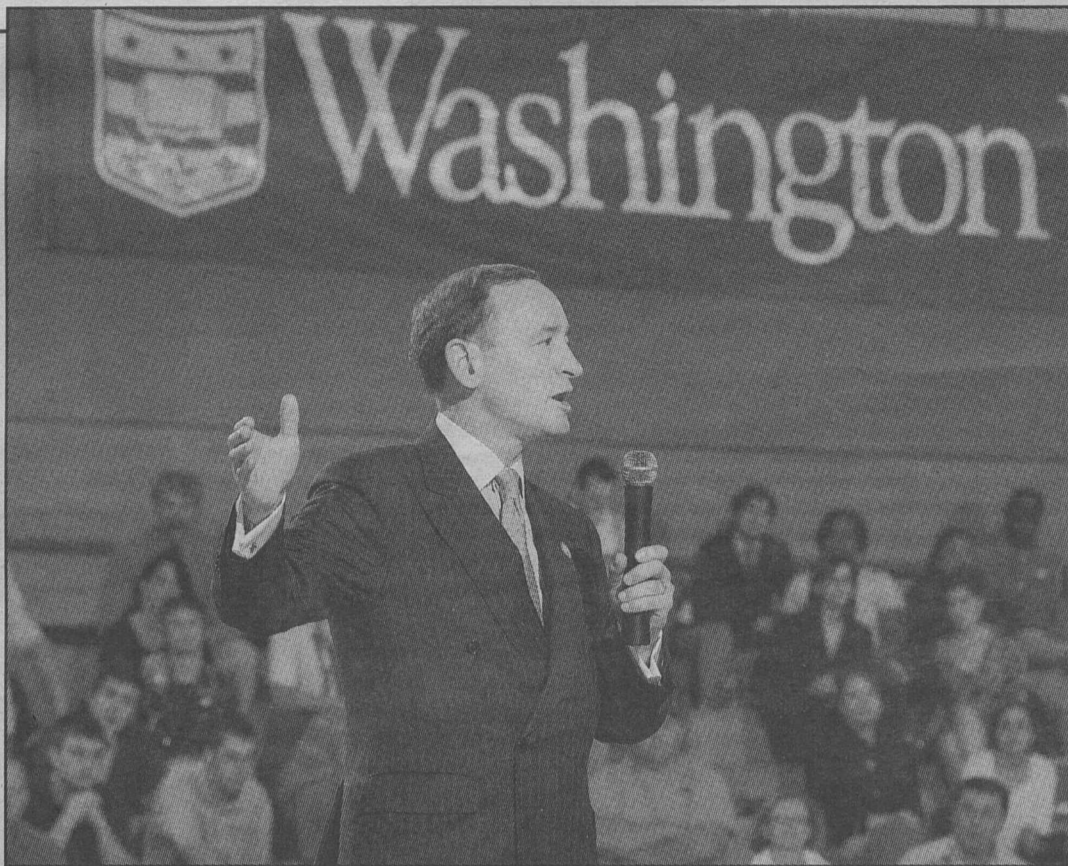
This Article is brought to you for free and open access by the Washington University Publications at Digital Commons@Becker. It has been accepted for inclusion in Washington University Record by an authorized administrator of Digital Commons@Becker. For more information, please contact vanam@wustl.edu.

Record

Washington University in St. Louis

Oct. 16, 2008

record.wustl.edu



A job well done Chancellor Mark S. Wrighton offers his thanks to the hundreds of faculty, student and staff debate volunteers gathered for an appreciation lunch at the Field House in the Athletic Complex Oct. 10 for the countless hours and dedication put into making the vice presidential debate a success. Also offering praise was Rob Wild, assistant to the chancellor and chair of the Vice Presidential Debate Steering Committee. "We have so many talented people here who came together to make sure that Oct. 2, 2008, was a historic and spectacular day for Washington University," Wild said. "I could not be more proud of this team effort."

Brauers' generosity to support engineering for years to come

Chancellor Mark S. Wrighton announced that the University has received a major commitment from Stephen and Camilla Brauer to help implement the long-range, strategic plan of its School of Engineering & Applied Science.

The commitment was made in the form of a challenge grant, which will match all gifts and commitments from alumni, parents and friends — up to the maximum of the commitment by the Brauers — which are earmarked for support of the annual and long-term needs of the engineering school. These include scholarships and fellowships, research, new and ongoing academic programs and initiatives, the annual fund and construction and renovation of physical facilities.

"Steve and Kimmy Brauer are two of St. Louis' and America's most distinguished citizens," Wrighton said. "They have been steadfast friends of Washington University for many years, and through their leadership, generosity and service, they have left an indelible imprint both on the University and the School of Engineering."

This fall, ground will be broken for the second building in a new complex for the engineering school, located near the northeastern perimeter of the Danforth Campus. Wrighton announced that the building will be named in honor of the Brauers to recognize their longstanding devotion to and impact on the University.

"We will be honored to have the Brauer name associated with the University and the school in such a prominent way," he said. "I think this is a most fitting way for the University to recognize all they have done."

Wrighton said that since Stephen Brauer joined the Board of Trustees in 1991, he has championed the goal of accelerating Washington University's ascent among the world's premier univer-

sities and building a leading engineering school.

"The University has benefited greatly from Steve's wisdom and experience," Wrighton said. "As vice chair and now chair-elect of the Board of Trustees and chair of the School of Engineering's National Council, he is helping guide the long-term, strategic planning process that will set the direction for both the University and the school as we work to address the challenges facing society in our fast-changing world."

Stephen Brauer, former U.S. ambassador to Belgium, is chairman of Hunter Engineering Co., a leading manufacturer of computer-based, automotive service equipment for the global market, headquartered in St. Louis. Camilla Brauer is a leading figure in local cultural and civic organizations and has been recognized nationally for her volunteer work as a fund-raiser.

"Kimmy and I are proud to be so closely associated with Washington University," Brauer said. "The University's growth and its rise in reputation in the last 20 years have been truly remarkable. We believe the School of Engineering has terrific potential both for Washington University and for society; as well, it can be a catalyst for economic development in the St. Louis region. We are happy to add our support to its success."

When Brauer Hall is completed in 2010, the 150,875-square-foot facility will serve as home for the School of Engineering's Department of Energy, Environmental & Chemical Engineering (EECE), provide space for the International Center for Advanced Renewable Energy & Sustainability (I-CARES) and share facilities with the University's highly successful Department of Biomedical Engineering.

Led by Pratim Biswas, Ph.D., the Stifel and Quinette Jens Professor of Environmental Engineering Science, the newly created EECE's faculty is focusing its research with

See Building, Page 2

Calorie restriction may affect people differently than animals

By Jim Dryden

Calorie restriction, a diet that is low in calories and high in nutrition, may not be as effective at extending life in people as it is in rodents, according to School of Medicine scientists.

Previous research had shown that laboratory animals given 30 percent to 50 percent less food can live up to 50 percent longer. Because of those findings, some people have adopted calorie restriction in the hope that they can lengthen their lives. But the new research suggests the diet may not have the desired effect unless people on calorie restriction also pay attention to their protein intake.

In an article published online in September in *Aging Cell*, investigators point to a discrepancy between humans and animals on calorie restriction. In



Fontana

the majority of the animal models of longevity, extended lifespan involves pathways related to a growth factor called IGF-1 (insulin-like growth factor-1), which is produced primarily in the liver. Production is stimulated by growth hormone and can be reduced by fasting or by insensitivity to growth hormone. In calorie-restricted animals, levels of circulating IGF-1 decline between 30 percent and 40 percent.

"We looked at IGF-1 in humans doing calorie restriction," said first author Luigi Fontana, M.D., Ph.D., assistant professor of medicine at WUSTL and an investigator at the Istituto Superiore di Sanita in Rome, Italy. "We found no difference in IGF-1 levels between people on calorie restriction and those who are not."

The CR Society members, who call themselves CRONies (Calorie Restriction with Optimal Nutrition), had been on a calorie-restriction diet for an average of seven years when Fontana did the measurements, but their IGF-1 levels were virtually identical to sedentary people who ate a standard

See Diet, Page 6

Bird diversity lessens human exposure to West Nile Virus

By Tony Fitzpatrick

This one's for the birds. A study by WUSTL biologists shows that the more diverse a bird population is in an area, the less chance humans have of exposure to West Nile Virus (WNV).

"The bottom line is that where there are more bird species in your backyard, you have much lower risk of contracting West Nile fever," said Brian Allan, doctoral candidate in biology in Arts & Sciences.

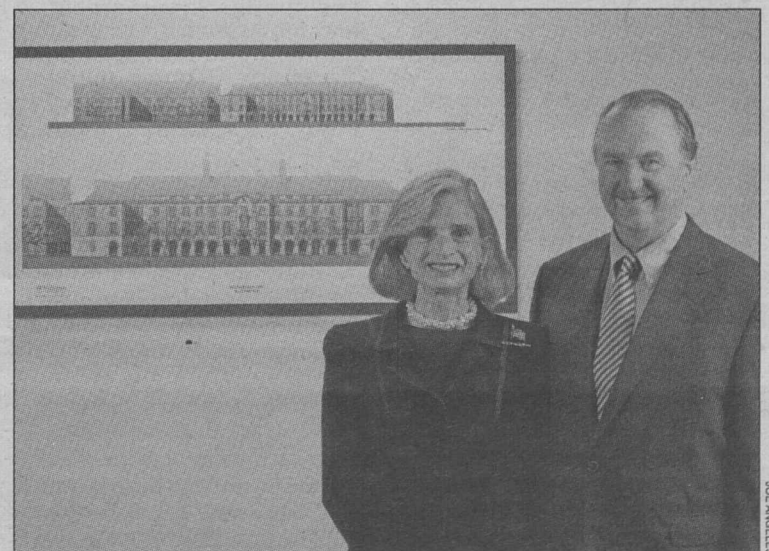
"The mechanisms are similar to those described for the ecology of Lyme disease," Allan said. "Most birds are poor reservoirs for West Nile Virus, and so mosquito bites taken on them are 'wasted' from the perspective of the virus.

"Where many bird species exist, very few mosquitoes get infected, and so we humans are at low risk. A few bird species are highly competent reservoirs, and these tend to occur in urbanized and suburbanized areas where bird diversity suffers," Allan said.

The most common "reservoir" species that urbanites and suburbanites and even rural dwellers in heavily farmed landscapes see are crows, grackles, house finches, blue jays, sparrows and American robins, with the robin being the most prolific carrier of WNV.

Robins are anthrophilic — they love being around humans — and it's relatively easy for mosquitoes to take their blood meals from them because robins feed so much on the ground.

See Birds, Page 6



Camilla and Stephen Brauer in front of a rendering of the engineering building that will bear their name. The building is scheduled for completion in 2010.

University expects financial stability

By STEVE GIVENS

In the midst of a national financial crisis, colleges and universities across the United States are grappling with their own economic realities and challenges related to operating budgets, financial aid for students and endowment spending.

"I am confident that we have the ability to weather these difficult financial times," said Chancellor Mark S. Wrighton in an interview last Friday. "I know that many in the Washington University family are experiencing the unpleasant effects of the recent market turbulence. We will continue to pay very close attention to the financial situation, and we will make prudent adjustments as they are necessary — adjustments that will be minimally disruptive to our core academic mission."

According to Barbara Feiner, vice chancellor for finance and chief financial officer, the University's broad mix of investments, diverse revenue streams and prudent endowment spending policies should allow WUSTL to lessen the impact of the recent market volatility on University operations.

"We continue to review and assess our financial situation and believe that recent events will not affect our ability to operate the University and address the individual financial situations of our students and their parents," Feiner said Oct. 9. "We're not sitting back and waiting to see what's going to happen; we are proactively taking steps to ensure the University's economic health during these difficult financial times."

Feiner said that because WUSTL has been a strong and dedicated steward of all of its financial resources, it is in the position of having the liquidity required to meet its daily needs. The University's financial strength gives it access to various sources of liquidity, including bank lines of credit, if needed.

But that doesn't mean that the University can proceed without caution and careful planning, Feiner said. She noted that, as the budgeting process begins for the coming academic year, schools and departments of the University will be reviewing all expenditures to see where appropriate cuts and belt-tightening measures might be made, if necessary.

"It is our responsibility to the entire WUSTL community and to the future of the University to do so," she said. "Like all of our own

household budgets, the University's may be tight in the near term."

University financial administrators are evaluating the impact of the current crisis on the endowment, charitable giving, operational budgets and construction plans as well as the financial situations of students and their families.

Director of Student Financial Services William H. Witbrodt stressed that students who have seen a change in the financial situations of their families are encouraged to visit the Office of Student Financial Services in North Brookings Hall.

"The University is committed to helping students and considering all aspects of the financial circumstances of their families," Witbrodt said. "We never want to lose one of our great students because a family financial situation has changed. We are here to help."

During the past year, there have been calls from special interest groups and some in Congress for universities to have a mandated rate of endowment payout. But according to Feiner, the current financial crisis illustrates well why colleges and universities have been averse to such calls.

"A minimum payout requirement could significantly deplete the corpus of the endowment in a period of investment declines," Feiner said. "Unlike charitable foundations that are required by federal law to spend a minimum of 5 percent of their assets each year, spending from a university's endowment is done with a long-term view in mind."

Kimberly Walker, the University's chief investment officer, concurs. "Endowment management is challenging during this period of volatility and uncertainty in the financial markets," she said. "The University's endowment is managed to both fund current operations and provide for the future. We never lose sight of the fact that what we do today will affect the University for generations to come. Our investment policy calls for a diverse mix of assets that should serve the University well both over the near- and longer-term horizons."

As the current financial crisis evolves both nationally and at the university level, Feiner said the University is committed to ongoing, clear and realistic communication with the WUSTL community about both positive and negative developments.

Time to give thanks, give back

By NEIL SCHOENHERR

Now in its sixth year, the Give Thanks Give Back campaign at Washington University again will strive to make the holiday season a bit merrier for some needy St. Louis families.

Give Thanks Give Back supports a group called "100 Neediest Cases," a joint project of the St. Louis Post-Dispatch and the United Way. The 100 Neediest Cases identifies more than 10,000 cases of St. Louis-area residents struggling to overcome poverty during the holiday season.

Although each of the 10,000 cases will receive some assistance, only a small percentage of families are "adopted," meaning that an individual or group agrees to buy gifts, clothing, household appliances or other requested items for the family.

WUSTL normally adopts around 120 families each year, which amounts to more than 300 individuals.

"Most of the people we adopt

are hard-working but have been temporarily set back by a layoff or injury and are having trouble feeding their kids and clothing them for the winter," said junior Lynn Wilkie, co-chair of this year's Give Thanks Give Back student group.

"We help them get back on their feet by tapping into the generosity of the University community," Wilkie said.

University groups or individuals can begin adopting families now. Gifts are due by Nov. 14, and there are gift-wrapping parties scheduled for Nov. 15 and 22 in Umrath Lounge.

The program has a history of success at the University. The Office of Student Activities first became involved in the program in 1998, when staff members adopted a single family. By 2001, the effort had evolved into a campus-wide program called Give Thanks Give Back.

For more information, e-mail gtgb@sugroups.wustl.edu or visit sugroups.wustl.edu/~gtgb.



The merits of public service Students, faculty and staff participate in a University-wide Public Service Fair in the Danforth University Center Sept. 23. Sponsored by the Gephardt Institute for Public Service and the Community Service Office, this event featured more than 60 nonprofit organizations seeking volunteers and interns for a variety of opportunities. The Gephardt Institute hopes to make this an annual event.

Building Hall will connect to existing building

— from Page 1

industrial partners on environmental engineering science, energy systems and chemical engineering and is educating students to address global challenges in those areas and environmental public health.

I-CARES is directed by Himradi Pakrasi, Ph.D., the George William and Irene Koechig Freiberg Professor of Biology in Arts & Sciences and professor of energy in the School of Engineering & Applied Science. I-CARES is a major initiative that encourages and coordinates University-wide and external collaborative research with other regional research institutions into biofuels and other alternative energy applications.

The Department of Biomedical Engineering, which was created in 1997, is chaired by Frank Yin, M.D., Ph.D., whose relationship with the Brauers extends back 10 years to the time when he was installed as the first Stephen F. and Camilla T. Brauer Distinguished Professor of Biomedical Engineering. The department now enrolls approximately 40 percent of engineering students, and, in just one decade, it has become nationally recognized as one of the top biomedical engineering departments in the country.

"We recognized that to be successful in attracting leading, research-active faculty and superb students to the School of Engineering & Applied Science, people who can help us realize our vision to establish Washington University as a hub for environmental and energy research, education, innovation and action, we must have the physical facilities supportive of and commensurate with this ambition," said Salvatore P. Sutura, Ph.D., senior professor of biomedical engineering and interim dean of the School of Engineering & Applied Science.

Brauer Hall will connect with Uncas A. Whitaker Hall, home of the Department of Biomedical Engineering, on all three levels of its east facade. It will present a seamless quality to those within the two structures to create an extraordinary

physical presence on the northeast side of the Danforth Campus.

The architectural firm RMJM Hillier was chosen because it specializes in laboratory design and historic preservation.

The new building will embrace the Collegiate Gothic style so characteristic of the campus, and which harkens back to the original buildings that form the Brookings Quadrangle — an architecturally rich blend of academic, ecclesiastical and palatial design spanning five centuries.

In addition to state-of-the-art research and instructional laboratories, classrooms and specialized teaching areas, several conference rooms, faculty offices and numerous student work spaces, Brauer Hall will house office suites for the Dean of the School of Engineering and for the EECE department and its chairman.

An innovative feature of the new facility will be a 90-seat distance-learning classroom — the first of its kind at the University — that will be available for use by all academic departments and schools. Biswas said this classroom will be invaluable for communicating with EECE's research partners throughout the world.

It also will be used by students in a new doctoral student network to be launched soon to exchange ideas related to their research.

Facing south, the main entrance to Brauer Hall will lead into a sunlit lobby that can double as a reception area, much like the atrium entrance in Whitaker Hall.

All of WUSTL's recent construction projects have been built with environmental sustainability in mind, and this building also is being designed as a green structure according to LEED specifications for a gold rating.

LEED, the acronym for Leadership in Energy and Environmental Design, is a nationally accepted rating system for the design, construction and operation of buildings that use its specifications for achieving environmental sustainability.

The company Stephen Brauer heads, Hunter Engineering, was founded by his stepfather, Lee Hunter, an automotive engineer — and Auto-

motive Hall of Fame inductee — famous for his inventions, which revolutionized the automotive service industry. A native St. Louisan, Lee Hunter attended Washington University, served on the School of Engineering Task Force in the 1980s and was a member of the Board of Trustees from 1982 until his death in 1987.

Brauer started with Hunter Engineering in 1971 after serving three years in the U.S. Army Corps of Engineers. He became chief operating officer in 1978 and chief executive officer in 1980.

In the past 20 years, Hunter has achieved remarkable growth through research and new product development. In the area of machine vision technology, in particular, Hunter has collaborated with Joseph O'Sullivan, Ph.D., the Samuel C. Sachs Professor of Electrical Engineering, among others, to bring that technology to the field of measuring vehicle suspension and alignment.

From 2001-03, Brauer served as U.S. ambassador to Belgium. Upon returning to the United States, he resumed his position at Hunter Engineering.

He is past president of the Missouri Botanical Garden board of trustees; a partner in The St. Louis Cardinals Baseball LP; a member of St. Louis Civic Progress; and a director of Ameren. His long association with the University began in 1987 when he joined the National Council for the School of Engineering. He was appointed to the University's Board of Trustees in 1991.

Camilla Brauer is a cultural and civic leader in the St. Louis region and is vice chair of the United Way of Greater St. Louis.

At WUSTL, she serves as a member of The Danforth Circle Committee of the William Greenleaf Eliot Society. In 1996, the National Society of Fund Raising Executives named her the Outstanding Fund Raising Volunteer in the United States.

The Brauers have provided significant support for scholarships for students in the School of Engineering and in the John M. Olin Business School. They endowed the Stephen F. and Camilla T. Brauer Distinguished Professorship in Biomedical Engineering and have contributed generously to support University initiatives, including facility expansions such as the laboratory addition in Jolley Hall.

The Brauers are Life Patrons of the William Greenleaf Eliot Society.

School of Medicine Update

Predictive tool can help determine breast cancer treatment

By GWEN ERICSON

A new predictive measurement, called a PEPI (preoperative endocrine prognostic index) score, could bring good news to many women diagnosed with early stage breast cancer — a low PEPI score could show that they have little risk of relapse and can safely avoid chemotherapy after surgery.

For others, a high PEPI score could warn that the risk of relapse after breast surgery is large and indicates that careful follow-up and aggressive therapy may be needed, say researchers at the School of Medicine and at collaborating institutions in Europe.

A team led by Matthew Ellis, M.D., Ph.D., the Anheuser-Busch Endowed Professor in Medical Oncology, developed and validated the PEPI score. Ellis asserted that predictive tools such as this are vital to breast cancer treatment and research.

"At present, about 83 percent of patients are cured of breast cancer," he said. "The key is to identify that 83 percent so we can treat them with effective available therapies and focus our research efforts on the 17 percent who are resistant to current treatments."

The PEPI score was derived from tumor characteristics present after women with stage 2 and 3 breast cancer underwent four months of anti-estrogen therapy before having breast surgery. Presurgical anti-estrogen therapy with drugs such as tamoxifen and letrozole can shrink tumors that depend on estrogen for their growth and potentially allow breast-conserving surgery. The majority of breast cancer patients have these estrogen receptor-positive tumors.

"This is a groundbreaking approach to predicting outcomes for patients with hormone receptor-positive breast cancer," said Ellis, a breast-cancer specialist with the Siteman Cancer Center.

"In essence, we are looking at how tumors respond to anti-estrogen therapy in the short term to predict how well patients will do in the long term."

The study was published in the Sept. 23 online issue of the *Journal of the National Cancer Institute*.

The PEPI score takes into account four factors present after presurgical anti-estrogen therapy to estimate risk of relapse and survival rates:

- the size of the breast tumor;
- whether cancer is present in

nearby lymph nodes;

- how fast tumor cells are multiplying; and
- whether tumors lose their estrogen receptors.

The researchers found that women with a PEPI score of zero had almost no risk of cancer recurrence during the five-year follow-up and could safely avoid taking chemotherapeutic agents after surgery.

Women with PEPI scores of 4 or above are at very high risk of having their cancer return and should be given all appropriate postsurgical treatments, according to the report.

Those with PEPI scores of 1 to 3 fall in an intermediate group, and more studies are needed to determine the best courses of

treatment for them, Ellis said.

PEPI scores are derived by assigning a certain number of points to each of the four PEPI factors. Patients with a PEPI score of 0 had a tumor that shrank to stage 0 or 1 or 2A after anti-estrogen therapy, and no cancer was present in lymph nodes.

Women with PEPI scores of 4 or more tended to have larger tumors after anti-estrogen therapy and also were likely to have cancer in lymph nodes, high rates of tumor cell growth and tumors that lost their estrogen receptors. These women had about a 50 percent chance of relapse.

An intermediate group with PEPI scores of 1 to 3 had either large tumors but few of the other dangerous markers or small

tumors with more of the dangerous markers.

Further study will be needed to determine the relapse risk for this group as well as to validate the PEPI model for predicting breast cancer death. Preliminary data showed that, as expected, women with low PEPI scores survived longer on average than those with high PEPI scores.

"We're entering a completely different diagnostic situation now, where we can profile stage 2 and 3 tumors after anti-estrogen therapy and use the results to guide the next treatment steps," Ellis said.

"Further research will determine whether a similar approach can predict outcomes in women with earlier stage breast cancers," he said.



Ellis



Charting the waters (From left) Angela Sharkey, M.D., professor of pediatrics; Tamara Hershey, Ph.D., associate professor of psychiatry, of neurology and of radiology; Jeanne M. Nerbonne, Ph.D., the Alumni Endowed Professor of Molecular Biology in the Department of Developmental Biology; Susan Mackinnon, M.D., the Sydney M., Jr. and Robert H. Shoenberg Professor of Surgery and chair of the Division of Plastic and Reconstructive Surgery; and Diana Gray, M.D., associate dean for faculty affairs and professor of obstetrics and gynecology and of radiology, discuss women in science and medicine at the Spotlight on Women in Medicine and Science (SWIMS) symposium and panel Sept. 26 at the Farrell Learning and Teaching Center. In the symposium, Nerbonne; Mackinnon; Hershey; Mary E. Klingensmith, M.D., associate professor of surgery; and Robyn S. Klein, M.D., Ph.D., assistant professor of medicine, of pathology and immunology and of neurobiology, spoke about their research and about special issues and obstacles for women in their respective fields. The Office of Faculty Affairs and the Department of Pediatrics' Office of Faculty Development sponsored SWIMS.

Health Happening to focus on hypertension Oct. 24

By BETH MILLER

About one-third of adults in the United States has high blood pressure, but because there are no outward symptoms, many people don't know they have it. High blood pressure can lead to serious problems such as stroke, heart failure, heart attack and kidney failure.

The School of Medicine is hosting free blood pressure screenings and offering information about stroke risk at Health Happening '08 Oct. 24 from 7 a.m.-5 p.m.

The event, sponsored by the School of Medicine's Wellness Council, will be held in the first-floor atrium of the McDonnell Pediatrics Research Building on Children's Place and is free to all School of Medicine employees. The fair's focus on hypertension will include free blood-pressure screenings by students in the

medical degree program, the Program in Physical Therapy, the Program in Occupational Therapy, the Program in Audiology and Communication Sciences and the Goldfarb School of Nursing at Barnes-Jewish Hospital. Each participant will receive his or her results from the screener. All of the results will be kept confidential.

"We decided to focus on hypertension after the feedback we received from the first Health Happening '08 held in the spring," said Legail Chandler, director of human resources at the School of Medicine. "From the anonymous data we collected from the screenings offered that day, we realized that hypertension is a concern for many of our employees."

In addition, Washington University faculty physicians specializing in stroke and cardiovascular diseases will be on hand to answer questions and offer information about stroke risks, the

effects of hypertension and how to lower blood pressure.

Hypertension risk factors include obesity, excessive drinking and family history. Smoking increases the risk of complications from hypertension. Participants can learn more about the effects of smoking and hypertension, get information on smoking cessation and sign up for the free Freedom From Smoking classes offered by the University.

"Hypertension and smoking are a risky combination," said Walton Sumner II, M.D., associate professor of medicine and a member of the Wellness Council. "Smoking makes the complications of high blood pressure happen faster. The good news is that we now have several safe, helpful and affordable treatments for both problems."

Also on hand will be representatives from Siteman Cancer Center, who will work with employees to evaluate their risk for five major diseases using its YourDiseaseRisk.com Web site, an easy-to-use tool that offers information about risk factors and prevention strategies for cancer, heart disease, diabetes, stroke and osteoporosis.

Participants will be entered into a drawing for one of three \$300 MasterCard money cards. The health results form used to record screening results will have a number on it. Winning numbers will be announced by e-mail Oct. 27. Winners must contact Human Resources to claim prizes.

Nominees for Goldstein Leadership Award sought

It's time to nominate School of Medicine faculty for the 2008 Samuel R. Goldstein Leadership Awards in Medical Student Education.

Three awards of \$5,000 each are provided annually through a gift from Samuel R. Goldstein. The awards acknowledge faculty leadership in medical student education and the tradition and responsibility teaching faculty demonstrate in training the best and brightest medical students to become physicians who

practice medicine of the highest quality.

School of Medicine faculty members who are involved in teaching medical or MSTP students are eligible for nomination.

To nominate a faculty member, individuals must complete a form available at internalcompetitions.wustl.edu/ocfr/grants.nsf/Achievement?OpenView and submit to witzelc@wusm.wustl.edu. The deadline for nominations is 5 p.m., Oct. 20.

Genomic medicine division awards first Ladenson Fellowship

By MICHAEL C. PURDY

The Division of Laboratory and Genomic Medicine has awarded the first Jack H. Ladenson Fellowship in Experimental Clinical Physiology to Brian T. Edelson, M.D., Ph.D., a postdoctoral fellow in the laboratory of Ken Murphy, M.D., Ph.D., professor of pathology.

The fellowship was created to honor the many professional and departmental contributions of Ladenson, Ph.D., who is the Oree M. Carroll and Lillian B. Ladenson Professor of Clinical Chemistry in Pathology and Immunology and former director of the division. It

provides financial support to outstanding postdoctoral researchers preparing to establish their own laboratories.

"We're finding that training can sometimes take longer than the number of years mandated by traditional residency or fellowship programs," said Barry Sleckman, M.D., Ph.D., director of the division. "The fellowship sets up a new paradigm that helps bridge the end of formal residency or fellowship training and the start of their independent career. We thought this might be particularly important given the challenging funding environment young scientists are thrust into nowadays."

Deadline for Bear Cub Fund grants extended

The University's Bear Cub Fund has extended its deadline for grant applications to Nov. 14. The fund, which supports innovative translational research, is soliciting grant applications from University researchers who want to move inventions from their laboratories toward commercialization.

Individual grants of \$20,000 to \$50,000 will be awarded in

the spring. Any WUSTL faculty member, postdoctoral fellow, graduate student or employee may apply.

Earlier this year, four Bear Cub grants totaling \$150,000 were awarded to WUSTL scientists. For more information about the grants and to download an application, visit otm.wustl.edu/bearcubfund/index.asp.

University Events

PAD presents classic presidential satire 'Of Thee I Sing'

By LIAM OTTEN

Biden vs. Palin vs ... Throttlebottom? Though the vice presidential debate may be over, the political fun continues at Washington University with "Of Thee I Sing," the classic musical satire of American public life.

Presented by the Performing Arts Department (PAD) in Arts & Sciences, "Of Thee I Sing" opens at 8 p.m. Oct. 24 in Edison Theatre and continues through Nov. 2.

Featuring music and lyrics by George and Ira Gershwin and written by George S. Kaufman and Morrie Ryskind, "Of Thee I Sing" centers on the presidential candidacy of the dashing John P. Wintergreen and his running mate, Alexander Throttlebottom.

Building their campaign on a platform of "love," the candidates' election committees concoct a pageant to select the nation's prettiest girl, whom Wintergreen publicly agrees to marry.

Yet Wintergreen soon falls for, and proposes to, the plainspoken pageant organizer, Mary Turner, much to the indignation of winning beauty Diana Deveraux.

Unfortunately for Wintergreen, Deveraux turns out to be "the



Members of the cast of "Of Thee I Sing" include: (from left) Carli Miller as Mary Turner, David Weiss as John P. Wintergreen and Catherine Moreton as Diana Deveraux.

illegitimate daughter of the illegitimate son of the illegitimate nephew of Napoleon," thus bringing the United States to the brink of war with France. In response, the Senate prepares impeachment hearings while Throttlebottom prepares for the White House.

"Of Thee I Sing" is a lampoon, but a very affectionate one," said director Jeffery Matthews, senior lecturer in drama. "It laughs at the

Congress, it laughs at the Supreme Court, it laughs at political candidates and the people who support them.

"The play opened at the height of the Great Depression, but it wasn't just escapist entertainment. In its own way, it recognized the problems of the day and accepted that world," Matthews said.

Perhaps as a result, "It was the longest-running Broadway

musical of the 1930s, and the first musical to win the Pulitzer Prize," Matthews said.

"The comedy is big and brash and, in many ways, very current. The notion of overly scripted politicians is, of course, still with us. The play doesn't just skewer the system or ask for change — it revels in the ridiculousness of it all. It says 'We're Americans, and this is who we are,'" he said.

The cast of 40 is led by seniors David Weiss and Carli Miller as Wintergreen and Turner, respectively, with sophomore Matt Rosenthal as Throttlebottom and junior Catherine Moreton as Deveraux. Also featured are junior Michael Martinez as the French ambassador; sophomore Adrienne Hayes as the chambermaid who inspires the "love" platform; and Gil Nussbaum, Ph.D., associate professor emeritus of radiation oncology in the School of Medicine, as the chief justice.

The stage design — by Angela Bengford, lecturer in performing arts in the PAD — is inspired by 1930s editorial cartoons and

includes original drawings, projected onto the stage, by Elizabeth Romaner, a senior in the Sam Fox School of Design & Visual Arts.

Costumes, which continue the broad '30s vibe — Supreme Court justices sport Groucho Marx glasses, for example — are by senior Lauren Talamo.

Lighting is by senior Will Calvert. Technical director is Sean Savoie, lecturer in performing arts.

Music director is Lisa Campbell-Albert, teacher of applied music.

Choreography is by St. Louis director/choreographer Millie Garvey.

Performances are at 8 p.m. Oct. 24 and 25 and at 2 p.m. Oct. 26.

Performances continue the following weekend at 8 p.m. Oct. 31 and Nov. 1 and at 2 p.m. Nov. 2.

Tickets — \$9 for students, faculty, staff and senior citizens and \$15 for the public — are available through the Edison Theatre Box Office and through all MetroTix outlets.

For more information, call 935-6543 or visit padarts.wustl.edu.

Global Warming • The Family Game • Advising the President

"University Events" lists a portion of the activities taking place Oct. 16-29 at Washington University. Visit the Web for expanded calendars for the Danforth Campus (news-info.wustl.edu/calendars) and the School of Medicine (medschool.wustl.edu/calendars.html).

Exhibits

"Birth of the Cool: California Art, Design and Culture at Midcentury." Through Jan. 5. Kemper Art Museum, 935-4523.

"Bold Strokes and Finesse: The Stage Designs of John Ezell." Through Nov. 22. Des Lee Gallery, 1627 Washington Ave. 621-8537.

Film

Wednesday, Oct. 22

7 p.m. **Japanese Film Series.** "The Family Game." Yoshimitsu Morida, dir. Seigle Hall, Rm. L06. 935-5110.

Tuesday, Oct. 28

7 p.m. **Jewish, Islamic and Near Eastern Film Series.** Middle East-North Africa Film Series. "Khali Balak Min Zouzou." Hassan Al-Imam, dir. Brown Hall, Rm. 118. 935-8567.

Lectures

Thursday, Oct. 16

Noon. **Genetics Seminar.** "Evolutionary Anatomies of Disease Mutations." Sudhir Kumar, The Biodesign Inst., Ariz. State U. McDonnell Medical Sciences Bldg., Rm. 823. 362-2139.

3 p.m. **Siteman Cancer Center Basic Science Seminar Series.** Gregory Longmore, prof. of medicine. Connor Auditorium. 454-7029.

4 p.m. **Chemistry Bayer Distinguished Lectureship.** "Functional and Supramolecular Metallopolymers." Ian Manners, prof. of inorganic & materials chemistry, U. of Bristol, U.K. (5:30 p.m. reception. Lab Sciences Bldg., Rettner Gallery.) Lab Sciences Bldg., Rm. 300. 935-4108.

8 p.m. **The Writing Program Fall Reading Series.** John Brandon, author. Hurst Lounge, Room 201, Duncker Hall. 935-7130.

Friday, Oct. 17

8:30 a.m.-5 p.m. **East Asian Studies Conference.** "Presenting China: Theory and Pedagogy." (Also 8:30 a.m.-5 p.m. Oct. 18.) Wilson Hall, Rm. 214. Registration

requested. 935-4448.

9:15 a.m. Pediatric Grand Rounds.

"Pediatric Interventional Electrophysiology: Science, Innovation, and the Incorporation of New Technology." George Van Hare, prof. of pediatrics. Clopton Aud. 454-6006.

11 a.m. **Chemistry Bayer Distinguished Lectureship.** "Functional Materials From Metal-Containing Block Copolymers via Solution Self Assembly and Living Supramolecular Polymerizations." Ian Manners, prof. of inorganic & materials chemistry, U. of Bristol, U.K. Lab Sciences Bldg., Rm. 250. 935-6530.

11 a.m. **Energy, Environmental & Chemical Engineering Seminar Series.** "Recent Efforts in Bioaerosol Sampling, Detection, Quantification as well as Microbial Inactivation." Maosheng Yao, Peking U. Lopata Hall, Rm. 101. 935-5548.

Noon. **Cell Biology & Physiology Seminar.** "Dynamic Analysis of Embryogenesis." Rusty Lansford, lecturer in bioengineering, Calif. Inst. of Technology. McDonnell Medical Sciences Bldg., Rm. 426. 362-6950.

7:30 p.m. **Saint Louis Astronomical Society Meeting.** "An Ancient Eye Test — Using the Stars." George Bohigian, prof. of clinical ophthalmology & visual science. McDonnell Hall, Rm. 162. 935-4614.

Saturday, Oct. 18

10 a.m. **Physics Saturday Science Lecture Series.** "Advising the President: What Scientific Advice Does the President Get?" Michael Friedlander, prof. of physics. Co-sponsored by U. College. Crow Hall, Rm. 201. 935-6276.

Monday, Oct. 20

Noon. **Work, Families and Public Policy Brown Bag Seminar Series.** "The Impact of Childhood Health on Adult SES Outcomes." Jim Smith, RAND Corp. Seigle Hall, Rm. 348. 935-4918.

4 p.m. **Breast Cancer Research Group Seminar Series.** "Can we Lower Breast Cancer Risk? Moving Biology + Intuition into Population-based Approaches." Leslie Bernstein, prof. and dir. of cancer etiology, City of Hope. Center for Advanced Medicine, Farrell Conference Rm. 2. 454-8981.

5:30 p.m. **Cardiac Bioelectricity & Arrhythmia Center Seminar.** "Advances in the Treatment of Ventricular Tachycardia." Timothy W. Smith, asst. prof. of medicine. (5 p.m. reception.) Whitaker Hall, Rm. 218. 935-7887.

6:30 p.m. **Sam Fox School Public Lecture Series.** Eugene J. Mackey, Jr. Memorial Lecture. Richard J. Jackson, visiting prof., U. of Calif., Los Angeles. Co-sponsored by the Center for Ethics and Human Values. Steinberg Aud. 935-9300.

Tuesday, Oct. 21

7:30 a.m.-noon. **Corporate & Foundation Relations Employer Smoking Cessation Summit.** Eric P. Newman Education Center. To register: 935-9713.

Noon. **Molecular Microbiology & Microbial Pathogenesis Seminar Series.** "A 'Surge' in Genomic and Genetic Approaches to Leishmania Virulence." Stephen Beverly, prof. of molecular microbiology. Cori Aud., 4565 McKinley Ave. 286-1123.

4 p.m. **Assembly Series.** Peggy Orenstein. Graham Chapel. 935-5285.

Wednesday, Oct. 22

Noon. **Mallinckrodt Institute of Radiology Lecture.** Annual Wendell G. Scott Memorial Lecture. "Quality Tsunami in American Medicine: Role of Board Certification and Maintenance of Certification." Gary J. Becker, exec. dir., American Board of Radiology. Scarpellino Aud., 510 S. Kingshighway Blvd. 362-2866.

3 p.m. **Siteman Cancer Center Seminar.** "Defective Receptor Signaling in Glioma." Webster Cavenee, dir., Ludwig Inst., U. of Calif., San Diego. South Bldg., Rm. 3907, Philip Needleman Library. 454-8981.

5 p.m. **Center for the Study of Ethics & Human Values Lecture.** Annual Daniel Bisno Lecture on Ethics in Medicine. "Aging and Retirement." Lazar Greenfield, FACS. Co-sponsored by the Dept. of Ophthalmology & Visual Sciences. Farrell Learning & Teaching Center, Connor Aud. 362-4418.

6:30 p.m. **Sam Fox School Public Lecture Series.** Hilman Curtis, principal and chief creative officer, hilmancurtis inc. Steinberg Aud. 935-9300.

Thursday, Oct. 23

7:30 a.m.-noon. **Thoracic Surgery CME Course.** "Contemporary General Thoracic Surgery." (Continues 1 p.m.-6:30 p.m. Oct. 24.) Cost: \$525, \$400 for allied health professionals. Eric P. Newman Education Center. To register: 362-6891.

11 a.m. **Chemistry Lecture.** "Novel Semiconductor Nanocrystals: Non-blinking and Ultra-small." Todd Krauss, assoc. prof.

of chemistry, U. of Rochester. McMillen Lab, Rm. 311. 935-6530.

Noon. **Barnes-Jewish Hospital Ethics Committee Lecture and Book Signing.** "Why Justice is Good for Our Health." Norman Daniels, prof. of ethics and population health, Harvard School of Public Health. Clopton Aud., 4950 Children's Place. 747-5361.

Noon. **Genetics Seminar.** "From Vial to Bedside: What the Fly Can Tell Us About Human Sleep Research." Paul Shaw, asst. prof. of neurobiology. McDonnell Medical Sciences Bldg., Rm. 823. 362-2139.

4 p.m. **Assembly Series.** Carl Bernstein. Graham Chapel. 935-5285.

4 p.m. **Ophthalmology and Visual Science Seminar Series.** "Intestinal Epithelial Stem Cell Niche Modification in Response to Injury." Thaddeus S. Stappenbeck, asst. prof. of pathology & immunology. Maternity Bldg., Rm. 725. 362-3315.

4 p.m. **Romance Languages & Literatures Lecture.** Annual Paul Rava Memorial Lecture. "Mapping Dante's Hell." Theodore J. Cachey Jr., prof. of Italian, U. of Notre Dame. Duncker Hall, Rm. 201, Hurst Lounge. 935-5175.

4:15 p.m. **Earth & Planetary Sciences Colloquium.** "Spectral Analysis of Planetary Analogs Under Simulated Planetary Surface Conditions." Ed Cloutis, Dir., Centre for Forest Interdisciplinary Research, U. of Winnipeg. Earth & Planetary Sciences Bldg., Rm. 203. 935-5610.

6:15 p.m. **Germanic Languages and Literatures Lecture.** Liselotte Dieckmann Biennial Lecture. "The Statue as Rogue Object in German Romanticism." Catriona MacLeod, assoc. prof. of German, U. of Penn. Co-sponsored by The Committee on Comparative Literature. Duncker Hall, Rm. 201, Hurst Lounge. 935-5106.

8 p.m. **The Writing Program Fall Reading Series.** Visiting Hurst Professor. Jean Valentine, author. Hurst Lounge, Room 201, Duncker Hall. 935-7130.

Friday, Oct. 24

9:15 a.m. **Pediatric Grand Rounds.** Annual J. Neal and Lois Middlekamp Lecture. "Polio: A Look Back at America's Most Successful Public Health Crusade." David M. Oshinsky, Ph.D., Jack S. Blanton Chair in History, Univ. of Texas at Austin and Distinguished Scholar in Residence, New York U. Clopton Aud. 454-6006.

11 a.m. **Computer Science & Engineering Colloquium.** "Human Computation." Luis von Ahn, asst. prof. of computer science, Carnegie Mellon U. Cupples II Hall, Rm. 217. 935-6160.

11 a.m. **Electrical & Systems Engineering Seminar.** "Fast Imaging With Sparse Sampling." Zhi-Pei Liang, prof. of bioengineering, U. of Ill. at Urbana-Champaign. Bryan Hall, Rm. 305. 935-5565.

11 a.m. **Energy, Environmental & Chemical Engineering Seminar Series.** "Colloids as Building Blocks: Anisotropy and its Effect

Brandon returns for reading series

Novelist John Brandon, who earned a master of fine arts degree in 2001 from Washington University's Writing Program in Arts & Sciences, will read from his work at 8 p.m. Thursday, Oct. 16, for the Fall Reading Series.

Brandon is the author of "Arkansas," a darkly comic novel about rural drug distribution published last spring by McSweeney's Rectangulars imprint.

The story centers on Kyle and Swin, a pair of aimless drug runners operating — on vague orders from a boss they've never met — out of a dilapidated Arkansas state park.

"Brandon lays down a backstory for each character that blisters with such creepy, suffocatingly real particulars, a reader feels stricken to recognize them," said a review in the San Francisco Chronicle.

"He brilliantly evokes the trailer-trash, time-biding cultures of the Southern states: bland,

stagnant cities; towns stuffed with plastic, Wal-Mart junk and gimcracks; and the shuffling, dim lives lining the road to hell, along which our anti-heroes speed," the review said.

Brandon grew up on the Gulf Coast of Florida and, while writing "Arkansas," worked at a lumber mill, a windshield warehouse, a Coca-Cola distributor and several small factories, including one that produced perfume samples for fashion magazines.

His work has appeared in Subtropics, McSweeney's Quarterly Concern, Mississippi Review, The Believer, Words & Images and The Duck & Herring Co.

The talk is free and open to the public and takes place in Duncker Hall, Room 201, Hurst Lounge. A reception and book signing will immediately follow.

For more information, call 935-7130 or e-mail David Schuman at dschuman@wustl.edu.

Assembly Series to tackle women's issues, public ethics

Orenstein to discuss how women balance career and family in a changing world

BY KURT MUELLER

Best-selling author Peggy Orenstein will deliver the Olin Fellows Conference keynote address as part of the Assembly Series at 4 p.m. Tuesday, Oct. 21, in Graham Chapel. Orenstein's talk is titled, "Where's the Map? Navigating Women's Lives in a Half-Changed World."

Orenstein knows firsthand the challenges inherent in balancing career and family. With rare candor, she has written about painful decisions and mixed emotions during her journey of infertility, child raising and staying on-course professionally.

Her most recent work, "Waiting for Daisy: A Tale of Two Continents, Three Religions, Five Infertility Doctors, An



Orenstein

Oscar, An Atomic Bomb, A Romantic Night and One Woman's Quest to Become a Mother," was a New York Times best-seller.

Previous books include "Flux: Women on Sex, Work, Kids, Love and Life in a Half-Changed World" and "Schoolgirls: Young Women, Self-Esteem and the Confidence Gap."

Orenstein is a contributing writer for The New York Times Magazine and has written for The Los Angeles Times, USA Today, Vogue, Elle, Discover, More, Mother Jones, Salon, O: The Oprah Magazine and The New Yorker.

She has appeared on numerous television and radio programs, including ABC's "Nightline" and "Good Morning America"; NBC's "The Today Show"; and NPR's "Fresh Air."

Orenstein graduated from Oberlin College with a major in English literature. She lives in the San Francisco Bay Area with her husband, Oscar Award-winning filmmaker Steven Okazaki, and their daughter, Daisy Tomoko.

Bernstein to deliver timely talk on politics

BY BARBARA REA

One of the nation's most celebrated journalists, Carl Bernstein, will deliver the Elliot Stein Lecture in Ethics at 4 p.m. Oct. 23 in Graham Chapel.

The lecture, "Public Ethics: The Responsibilities of Elected Officials," is free and open to the public and is co-sponsored by the Center for the Study of Ethics and Human Values in Arts & Sciences.

As a cub reporter for the Washington Post, Bernstein was in the right place at the right time to become part of the story that became the Watergate scandal.

A break-in at the Democratic National Committee's headquarters at the Watergate Hotel in Washington, D.C., on June 17, 1972, got some media attention at first but was dismissed as a trivial matter.



Bernstein

But Bernstein and fellow reporter Bob Woodward did not give up.

They hunted down hundreds of leads despite intense criticism and found links between the burglars and the Committee for the Re-election of President Richard Nixon.

With the help of a source known as "Deep Throat," the reporters were able to find a link to Nixon, and, in an Oct. 10, 1972, story in the Post, disclosed that the Watergate break-in was part of a larger effort to sabotage Nixon's political opponents.

Bernstein left the Post in 1976 but continued to write, analyze and comment on aspects of American culture.

In addition to two books he co-wrote with Woodward about Watergate and the Nixon era, Bernstein has authored three books, including his most recent, "A Woman in Charge: The Life of Hillary Rodham Clinton."

For more information on these and other Assembly Series programs, please visit the Web site at assemblyseries.wustl.edu or call 935-4620.

Dance Marathon: 10 years of toe tapping for a good cause

BY NEIL SCHOENHERR

The 2008 St. Louis Area Dance Marathon will begin at 3 p.m. Oct. 25 in the Recreational Gym of the Athletic Complex.

The 12-hour dance-a-thon is the culmination of a year's worth of fundraising for Children's Miracle Network of Greater St. Louis.

More than 1,000 participants have registered to dance, and visitors are welcome to make a \$5 donation and join the fun between 4 p.m. and 2 a.m. The day's schedule includes performances from campus and local dance groups, as well as contests and games.

"The Executive Board and I are so excited to celebrate the 10th Dance Marathon with the Washington University and St. Louis communities," said senior Lauren Statman, executive director of this year's St. Louis Area Dance Marathon. "With more than 1,000 dancers registered, and hundreds of parents and families visiting for Parents & Family Weekend, we are looking forward to hosting the most participants and visitors in

Dance Marathon history."

An added twist to the fundraiser this year: a text-messaging campaign. From now until Oct. 26, anyone who wishes to support Dance Marathon and Children's Miracle Network may send a text message to the number 90999 with the text "dance." This text message shows up as a one-time fee of \$5 on the donor's phone bill, and it goes to Children's Miracle Network.

"If every dancer, visitor and supporter of Dance Marathon each sends one text message, we can make over \$5,000 for Children's Miracle Network," Statman said.

Parents and families of dancers who are in for Parents & Family Weekend are especially invited to visit the marathon during Family Hours between 5-8 p.m. During this time, they can enjoy the Faculty and Staff Dance Entrance at 5:30 p.m., join their dancer for dinner beginning at 6 p.m., learn more about Dance Marathon in the "Decade of DM" museum and meet the families of children who have been treated in St. Louis hospitals.

Participants and visitors will

have the opportunity to bid in the "miracle auction" and special raffles. Prizes include four round-trip tickets courtesy of American Airlines and the "Rock Band 2" video game, courtesy of Best Buy.

Faculty and staff members are encouraged to attend a welcome reception at 4:30 p.m. in the lobby of the Athletic Complex but are also welcome to visit at any time.

Chancellor Mark S. Wrighton has volunteered to donate \$10 to Children's Miracle Network for every faculty or staff member who visits. The \$10 is in honor of 2008 marking the 10th Dance Marathon at WUSTL.

Information about donating and visiting can be found at dmstl.org.

Children's Miracle Network of Greater St. Louis supports St. Louis Children's Hospital and Cardinal Glennon Children's Medical Center.

All funds raised are used to help these hospitals fund programs, equipment and facility renovations to meet the needs of area children. In 2007, Dance Marathon donated more than \$176,000 to the charity.

Protect identity while online

The recent announcement that a hacker had compromised the personal e-mail account of vice presidential candidate Sarah Palin is a reminder of what can happen if people are not careful with accounts and passwords.

October is National Cyber Security Awareness Month, and Washington University is working to raise awareness of both work and home security practices to help prevent exposure of information and identity theft.

Throughout the month, the Information and Network Security Offices will be sending out e-mails, giving awareness presentations, handing out brochures and bookmarks and placing awareness posters throughout WUSTL campuses.

Below are 10 tips to help students, faculty and staff protect their identity while using the Internet.

1. Keep passwords to online accounts private and difficult to guess.
2. Choose very difficult to guess answers for security challenge questions.

3. Universities, banks and businesses will never ask for personal information via e-mail. Don't provide it if asked, and report the e-mail to the institution.

4. Do not open attachments or click on links in unsolicited e-mails.

5. Use a separate credit card or a one-time temporary credit card number for online purchases.

6. Turn on your computer's Firewall.

7. Keep your computer and software up to date.

8. Run up-to-date antivirus software.

9. Ask for a free, annual review of your credit history at annualcreditreport.com.

10. Visit Web sites such as staysafe.org and getnetwise.org to learn more about how to protect personal information online.

For more information, contact Brian Allen at ballen@wustl.edu or the School of Medicine Information Security Team at Infosec@wusm.wustl.edu.

on Particle Assembly." Michael Solomon, assoc. prof. of chemical engineering, U. of Mich. Lopata Hall, Rm. 101. 935-5548.

Noon. Cell Biology & Physiology Seminar. Robert J. French, prof. of physiology and biophysics, U. of Calgary, McDonnell Medical Sciences Bldg., Rm. 426. 362-6950.

Noon. East Asian Studies Lecture. "A Transnational History of Non-Saving in the United States." Sheldon Garon, prof. of history and East Asian Studies, Princeton U. Lab Sciences Bldg., Rm. 201. 935-4448.

4 p.m. Dept. of Music Lecture Series. "Anderson, Price, Norman, Graves: Making Opera American and the Color-Blind Double-Blind." Todd Decker, asst. prof. of music. Music Classroom Bldg., Rm. 102. 935-5566.

Saturday, Oct. 25

10 a.m. Physics Saturday Science Lecture Series. "Global Warming." Carl Bender, prof. of physics. Co-sponsored by U. College. Crow Hall, Rm. 201. 935-6276.

Monday, Oct. 27

4 p.m. Immunology Research Seminar Series. "Innate Immune Pathways for Chronic Inflammatory Disease." Michael Holtzman, prof. of medicine. Farrell Learning & Teaching Center, Connor Aud. 362-2763.

5 p.m. Asian and Near Eastern Languages and Literatures Lecture and Reading. "A Korean Authors' Visit: Bi-lingual Readings and a Discussion on Translation." Bruce Fulton, chair, Korean Literature and literary translation, U. of British Columbia; Lee Hye-kyung, author; Kim Aeran, author. Book signing follows. January Hall, Rm. 110. 935-5110.

5:30 p.m. Cardiac Bioelectricity & Arrhythmic Center Seminar. "What Does Atrio-Ventricular Node Rate Dependence Mean?" Jacques Billete, prof. of physiology, U. of Montreal. (5 p.m. reception.) Whitaker Hall, Rm. 218. 935-7887.

6:30 p.m. Sam Fox School Public Lecture

Series. Harris Armstrong Lecture. Kenneth Frampton, prof. of architecture, Columbia U. Steinberg Aud. 935-9300.

Tuesday, Oct. 28

8:15 a.m. Center for the Application of Information Technology (CAIT) Training Workshop. "Dynamic Enterprise BI Dashboards (Business Intelligence)." Free for CAIT member organizations, interested others please call. Eric P. Newman Education Center. 935-4444.

Noon. Molecular Microbiology & Microbial Pathogenesis Seminar Series. "Herpes Simplex Virus Commandeers the Host Cell Chaperone and DNA Damage Machinery." Sandra Weller, prof. and chair of molecular, microbial and structural biology, U. of Conn. Health Center. Cori Aud., 4565 McKinley Ave. 362-7361.

Wednesday, Oct. 29

4 p.m. Biochemistry & Molecular Biophysics Seminar. "Exploring the Energy Landscape: Disorder, Dynamics and Protein Function." Peter Wright, prof. and chair of molecular biology, The Scripps Inst. of Research. McDonnell Medical Sciences Bldg., Rm. 264. 362-4152.

8 p.m. Romance Languages & Literatures Lecture. "About War and Print Culture (Spain 1936-1939)." Jordana Mendelson, assoc. prof., Spanish & Portuguese Languages & Literature, New York U. McDonnell Medical Sciences Bldg., Rm. 250. 935-5175.

On Stage

Friday, Oct. 24.

8 p.m. "Of Thee I Sing" presented by the Performing Arts Dept. (Also 8 p.m. Oct. 25; 2 p.m. Oct. 26). Cost: \$15, \$9 for students, faculty, staff and senior citizens. Edison Theatre. 935-6543.

Music

Thursday, Oct. 23

8 p.m. Jazz at Holmes. Dave Stone, saxophone and Adam Maness, piano. Ridgely Hall, Holmes Lounge. 935-4841.

Sunday, Oct. 26

3 p.m. Concert. Liederabend with Dominic Armstrong, tenor. Graham Chapel. 935-5566.

Sports

Sunday, Oct. 19

11 a.m. Women's Soccer vs. Brandeis U. Francis Field. 935-4705.

1:30 p.m. Men's Soccer vs. Brandeis U. Francis Field. 935-4705.

Wednesday, Oct. 22

7 p.m. Volleyball vs. U. of Mo.-St. Louis. WU Field House. 935-4705.

Friday, Oct. 24

7 p.m. Men's Soccer vs. Dominican U. Francis Field. 935-4705.

Saturday, Oct. 25

9:30 a.m. Swimming and Diving Alumni Meet. Athletic Complex. 935-4705.

9:30 a.m. Women's Soccer vs. Rhodes College. Francis Field. 935-4705.

1 p.m. Football vs. Ohio Wesleyan U. Francis Field. 935-4705.

Monday, Oct. 27

7 p.m. Men's Soccer vs. Maryville U. Francis Field. 935-4705.

Election programming update

Election-related events continue on the Danforth Campus for those wanting more intellectual engagement about campaign issues.

Wednesday, Oct. 22

Noon. Student Debate Competitions on Election Issues: "Is our Country Ready for a Black President?" Danforth University Center Commons. Free and open to the public.

Thursday, Oct. 23

Noon. Student Debate Competitions on Election Issues: "Should the Drinking Age be Lowered to 18?" Danforth University Center Commons. Free and open to the public.

4 p.m. "Public Ethics: The Responsibilities of Elected Officials." Investigative journalist Carl Bernstein talks about the need for ethical governance and a free press to ensure it. Graham Chapel. Presented by the Assembly Series and the Center for the Study of Ethics and Human Values in Arts & Sciences. Free and open to the public.

5:30 p.m. Political Art Show. An exhibition/reception of student art reflecting political themes. Danforth University Center. Free and open to the public. For information, contact Lane Goodman at LaneG@samfox.wustl.edu

Thursday, Oct. 30

4:30 p.m. "Environmental Issues in Politics: What to Do About Proposed Energy Costs?" Location to be announced. Discussion with panelists from Missouri Coalition for the Environment and the Missouri Green Party as well as the Libertarian, Republican and Democratic parties. For information, contact the Environmental Social Work Initiative: kupshur@gwbmail.wustl.edu or gmsmetana@gwbmail.wustl.edu

Monday, Nov. 3

7:30 p.m. "Education Policy." A panel discussion featuring Washington University faculty and administrators presented by Controversy N' Coffee. Danforth University Center, Rm. 276. Coffee and dessert will be served. Free and open to the public.

For questions regarding programming, contact Robin Hattori at rhattori@wustl.edu or Brittany Perez at president@su.wustl.edu.

To access the entire election programming calendar, visit any of the following Web sites: assemblyseries.wustl.edu, gephardtinsttute.wustl.edu and gpc.wustl.edu.

Diet

Limiting protein could be key to long life

— from Page 1

Western diet.

Because calorie restriction is linked to extraordinary increases in maximal lifespan in rats and mice, Fontana and colleagues at WUSTL, including principal investigator John O. Holloszy, M.D., professor of medicine, have been involved in a scientific study that compares calorie restriction to exercise and measures many biological factors linked to longevity and health.

Called the CALERIE study (Comprehensive Assessment of the Long-term Effects of Reducing Intake of Energy), the project randomly divided 48 people into three groups: Eighteen cut their caloric intake by 25 percent for one year, another 18 started exercising to increase their energy expenditure by 25 percent for a year, and 10 people didn't change anything.

At the end of that year, the investigators measured IGF-1 levels in all three groups. Again they found no reductions in the group on calorie restriction.

"That was puzzling because it was the first time we hadn't seen agreement between mice and rats on calorie restriction and humans on calorie restriction," Fontana said. "But we know there are two major influences on IGF-1 levels: calorie intake and protein intake. So we decided to look at the influence of protein."

Fontana had a ready-made study group — a population of strict vegans his team has followed for several years. They tend to eat less protein than the CRONies, so he compared IGF-1 levels between the two groups.

"The vegans had significantly less circulating IGF-1, even if they were heavier and had more body fat than CRONies," he said. "Protein in the diet seemed to

correlate with the lower levels of IGF-1. The strict vegans took in about 10 percent of their total calories from protein, whereas those on calorie restriction tended to get about 23 or 24 percent of calories from protein."

The investigators wanted to take one more look at the relationship between dietary protein and IGF-1, so Fontana asked a group of CRONies to eat less protein for a few weeks, which can be difficult because those on calorie restriction have to do a lot of calculating to ensure they take in very few calories and still get adequate nutrition.

"But six of them agreed to lower their protein intake," Fontana said, "and after three weeks their circulating IGF-1 declined dramatically."

Previous research from Fontana's group had found that a diet lower in protein might protect against some cancers. These more recent findings suggest lowering protein also might be im-

portant to longevity. Fontana admits his evidence is preliminary, but the findings suggest that when people adjust their diets to improve health and lengthen life, they should control not only calories and fat but also keep an eye on protein.

Fontana isn't proposing radical low-protein diets but is suggesting the current recommended daily allowance (RDA) for protein, which is 0.82 grams of protein per kilogram of body weight, or about 56 grams of protein for an average adult man and 46 grams for an average adult woman. Most people, including CRONies, consume much more protein than the RDA recommendation.

"If our research is on the right track, maybe humans don't need to be so calorie restricted," he said. "Limiting protein intake to .7 or .8 grams per kilogram per day might be more effective. This is just a hypothesis."

"If our research is on the right track, maybe humans don't need to be so calorie restricted. Limiting protein intake to .7 or .8 grams per kilogram per day might be more effective."

LUIGI FONTANA

Birds

Robin is most prolific carrier of West Nile

— from Page 1

Allan, his adviser Jonathan M. Chase, Ph.D., associate professor of biology, and 14 collaborators from numerous institutions will publish their findings in a forthcoming issue of *Oecologia*.

While diversity of bird species is important in this scenario, that factor alone doesn't tell the whole story.

"It's not just about the number, but their relative proportions," Allan said. "It's a combination of richness — the number of species — and evenness — their relative proportions."

"In urban and suburban areas, you see lower species richness and lower community evenness. For instance, you might have five species present, but in 100 animals, 90 are just one species. That's why species number is only half the equation."

Allan and some of his fellow graduate students began the research five years ago as they entered graduate school and West Nile Virus was just beginning to receive attention.

The ecology of the organism hadn't been studied much, so they identified a variety of field

sites, both urban and rural, with their base of operations at Tyson Research Center and its 2,000 acres of woods, glades and prairie.

The students performed bird surveys at the sites, put up mosquito traps and studied different mosquito species and their ability to transmit the virus.

Using kits provided by the Centers for Disease Control and Prevention, they tested the mosquitoes and found three positive pools.

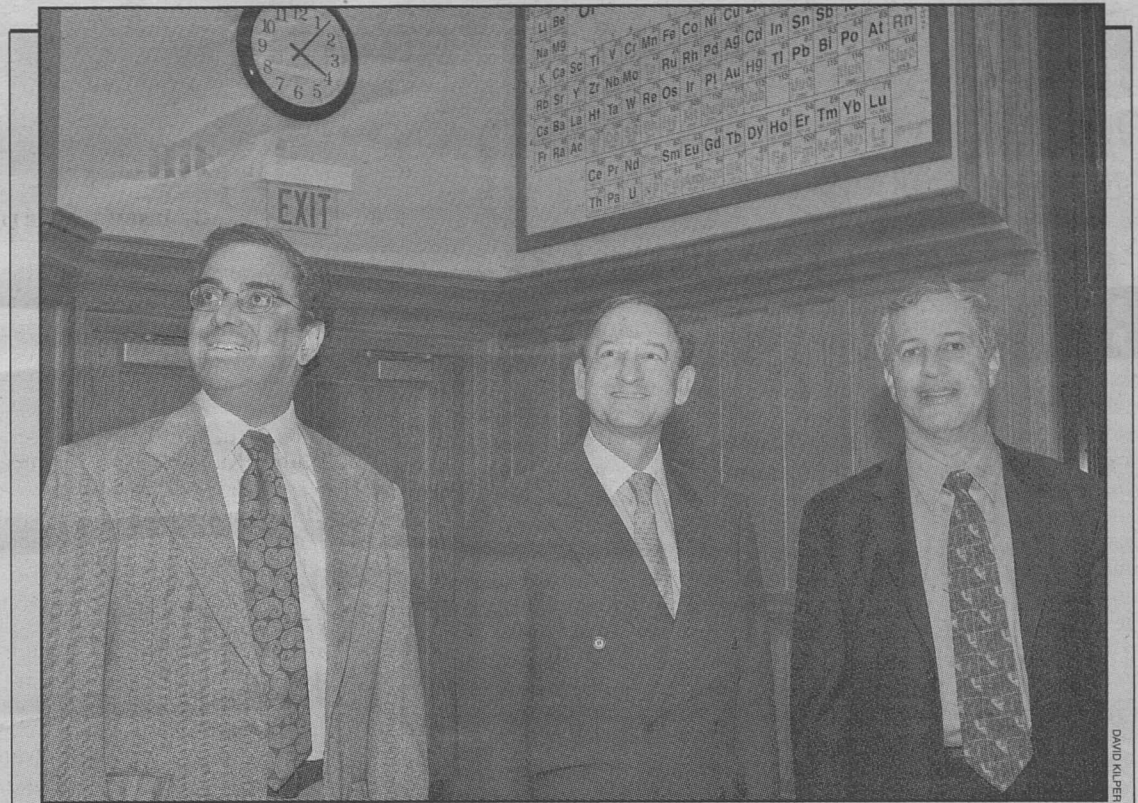
"The infection rates are actually remarkably low, with maybe one in 1,000 carrying WNV," Allan said.

They expanded their study to include mosquito infection data from the St. Louis City and St. Louis County Health departments. They saw the same patterns.

The greater bird diversity, the lesser incidence of WNV; the lesser diversity, the greater likelihood of WNV.

To broaden their finding even more, Allan and his colleagues used national data sets on human cases of WNV and a tool called the Shannon Diversity Index to estimate the diversity of bird populations across the United States.

"We're seeing locally and nationally that bird diversity is a buffer against the occurrence of West Nile Virus in humans," Allan said. "That's a win-win situation for both conservation and public health."



Looking into the future Nathan Lewis, Ph.D. (right), the George L. Argyros Professor of Chemistry at the California Institute of Technology, spoke to a large crowd Sept. 23 for the International Center for Advanced Renewable Energy and Sustainability (I-CARES). His lecture, "Where in the World Will Our Energy Come From?" examined a range of alternative energy issues and was very popular among students and faculty. Afterward, director of I-CARES Himadri B. Pakrasi, Ph.D. (left), the George William and Irene Koechig Professor of Biology in Arts & Sciences and professor of energy in the School of Engineering & Applied Science, and Chancellor Mark S. Wrighton survey the crowd with Lewis.

WUSTL hosts Campus Compact conference

By JESSICA MARTIN

Washington University will host the Missouri Campus Compact conference this weekend, Oct. 17-18, at the Knight Center. Campus Compact is a national coalition of more than 1,100 college and university presidents — representing some 6 million students — dedicated to promoting community service, civic engagement and service-learning in higher education.

This is the first year that Missouri Campus Compact will hold its annual conference at a university. With leadership from the Gephardt Institute for Public Service, the conference will engage more than 100 administrators, faculty and students from all over the state.

Edward F. Lawlor, Ph.D., dean of the George Warren Brown School of Social Work and the William E. Gordon Professor, will

introduce conference keynote speaker Richard Gephardt, who served nearly 30 years as U.S. Representative for Missouri's 3rd District.

The following University faculty, staff and students were selected to present at concurrent sessions at the conference:

- Suzanne Pritzker, doctoral candidate at the Brown School, on "Evaluating Civic Outcomes of Service-Learning Programs";
- Linda Cottler, Ph.D., professor of epidemiology in psychiatry, and Amy Helper and Catina O'Leary, research patient coordinators, on "The Washington University Center for Community-Based Research: A Model for the Successful Integration of Community, Service and Research";
- Jami Ake, lecturer in humanities, and Shaina Goodman, first-year law student, on "The Writing Component of Service-Learning:

Frames of Reference and Tools of Reflection";

- Sarah Tillery, community service coordinator, Michael Dango, student community service coordinator, and Michael Brown, coordinator for LGBT Student Involvement and Leadership, on "Building Partnerships and Using Problematic Policy to Foster Social Justice Dialogue";
- Robin Hattori, Gephardt Institute program director, and Jordan Aibel, sophomore in Arts & Sciences, on "Students and the Democratic Process: Voting, Education, and Action";
- Beth Martin, engineering and science director of the Interdisciplinary Environmental Clinic and lecturer in law, on "Experiences in Developing and Implementing Problem Based Service-Learning Courses";
- Cheryl Adelstein, director of community relations and local government affairs, and Victoria Thomas, Ph.D., fellow in Arts & Sciences, on "Models for Successful Community Partnerships: University as Convener: Washington University and the Big Read";
- Deb Salls, director of the Campus Y, on "YMCA Youth University Summer Program: A Model for Successful Community Partnerships."

The conference is open to the public.

Fees are \$50 for students and \$80 for faculty and staff.

For more information, contact Hattori at rhattori@wustl.edu.

Parents weekend starts Oct. 24

By NEIL SCHOENHERR

Parents & Family Weekend 2008 begins Oct. 24 and runs through Oct. 26. Activities include parents joining their sons and daughters for classes, art exhibits, open houses, tours, musical productions and a tailgate party before Saturday's football game.

Registration and check-in for parents begins at 8:30 a.m. Friday in the Women's Building Formal Lounge. The day will include open classes, a walking tour of the Central West End, a Cahokia Mounds tour and open houses.

On Saturday, Chancellor Mark S. Wrighton will give a talk titled "The Undergraduate Experience" at 10 a.m. in Brown Hall, Room 100.

The football game, which begins at noon at Francis Field, will feature the Bears taking on Ohio Wesleyan University. Adult tickets are \$5; student admission is free with a WUSTL ID.

A tailgate party will start at 11 a.m. at Francis Field. Tickets for the tailgate can be purchased online at parents.wustl.edu/ weekend.

The rest of the day will include tours of the Missouri Botanical Garden and the Kemper Art Museum, a bus tour of St. Louis, family hours at Dance Marathon, a hypnotist comedy show and a jazz lounge.

Record

Volume 33, Number 10

Founded in 1905 • Washington University in St. Louis community news

Associate Vice Chancellor Steven J. Givens
Executive Editor Susan Killenberg McGinn
Editor Leslie Gibson McCarthy
Associate Editor Neil Schoenherr
Assistant Editor Jessica Daves
Medical News Editor Beth Miller
Calendar Coordinator Angela Hall
Print Production Carl Jacobs
Online Production Tammy Ritterskamp

News & Comments
(314) 935-5293
Campus Box 1070
record@wustl.edu

Medical News
(314) 286-0119
Campus Box 8508
millerbe@wustl.edu

Calendar Submissions
Fax: (314) 935-4259
Campus Box 1070
recordcalendar@wustl.edu

Record (USPS 600-430; ISSN 1043-0520), Published for the faculty, staff and friends of Washington University. Produced weekly during the school year, except school holidays, and monthly during June, July and August by the Office of Public Affairs, Washington University, Campus Box 1070, One Brookings Drive, St. Louis, MO 63130. Periodicals postage paid at St. Louis, MO.

Where to send address changes
Postmaster and nonemployees: Record, Washington University, Campus Box 1070, One Brookings Drive, St. Louis, MO 63130. Employees: Office of Human Resources, Washington University, Campus Box 1184, One Brookings Drive, St. Louis, MO 63130.

Reprint permission
Articles may be reprinted with appropriate credit to Washington University in St. Louis Record.

Notables

Trustees hear reports on strategic planning, admissions and debate

At its fall meeting Oct. 3, the Board of Trustees heard strategic planning presentations from the School of Medicine and the School of Engineering & Applied Science, according to Chancellor Mark S. Wrighton.

In addition, reports were provided on the undergraduate admissions program and the vice presidential debate.

Larry J. Shapiro, M.D., executive vice chancellor for medical affairs and dean of the School of Medicine, co-presented a report on the future of the University's medical enterprise with Trustee Floyd E. Bloom, M.D., professor emeritus at the Scripps Research Institute.

For the School of Engineering & Applied Science, Salvatore P. Sutura, Ph.D., interim dean, co-presented strategic plans with Trustee Stephen Brauer, president of Hunter Engineering Co. and vice chair and chair-elect of the Board.

In his report to the trustees, Wrighton said that the freshman class totaled more than 1,400 students from all 50 states and nearly 20 countries, with approximately one-third representing minority or international students. He indicated that this is the strongest freshman class in University history.

Wrighton also reviewed the vice presidential debate, a first for Washington University in its history of hosting debates since 1992.

Of the four debates hosted by WUSTL, this one attracted the greatest number of news media and the broadest national and international attention. Students, faculty and the entire campus community came together to volunteer their services in preparing for the debate and working with approximately 3,100 media who were credentialed by the Commission on Presidential Debates to cover this event.

The chancellor praised the dedication, skill and hard work of the many women and men from throughout the University who assisted in making this a highly successful debate.

The chancellor reported that

Harry and Susan Seigle Hall was dedicated Sept. 25, with Nobel Prize winner Douglass C. North, Ph.D., the Spencer T. Olin Professor in Arts & Sciences, serving as the keynote speaker for this interdisciplinary structure for both the social sciences and the School of Law.

Wrighton also expressed the excitement over the continuing construction of the BJC Institute of Health at Washington University on the medical campus — the largest structure to be erected in University history. This facility will serve as the focus of research and exploration being conducted as part of the BioMed 21 initiative.

Also noted was the construction on new South 40 residential and food service facilities, renovation of Busch Hall, completion of the Village East residence hall and the recent opening of the Danforth University Center as the focus of student and faculty engagement outside the classroom.

Wrighton and Barbara Feiner, vice chancellor for finance and chief financial officer, shared the University's challenges in connection with the volatility in the financial markets. The University remains well positioned with respect to financial resources.

In closing, Wrighton praised the athletics program as it entered another strong year, with the football team at the time off to its best start since 2001 with a 3-0 record. Both the men's and women's soccer teams were ranked in the top 25, while the women's volleyball team was ranked fourth in the nation.

Both the men's and women's cross country teams were ranked 25th in national polls, and WUSTL had been selected to host the 2010 and 2011 NCAA Division III National Volleyball Championships.

The trustees also received reports from the following committees: audit, development, educational policy, medical finance, University finance and the Alumni Board of Governors.

Kim named associate dean at law school

By JESSICA MARTIN

Kent Syverud, J.D., dean and the Ethan A.H. Shepley University Professor at the School of Law, has named Pauline Kim, J.D., professor of law, associate dean for research and faculty development at the law school.

Kim succeeds Samuel Bagenstos, J.D., as associate dean.

"Pauline Kim has played an integral role in growing the academic and intellectual community at Washington University Law," Syverud said. "She is the right leader to take on this challenging position."

Kim joined the faculty of the School of Law in 1994. She recently served as the law school's inaugural John S. Lehmann Research Professor.

In her new role, Kim will promote and enhance the intellectual life of the law school. She will coordinate conferences and speakers at the law school as well as external and internal faculty workshops. Kim also will assist untenured faculty in their scholarly

development.

Kim's scholarship focuses on employment law, workplace privacy, litigation and courts, and judicial decision-making.

She earned her juris doctorate from Harvard University in 1988, magna cum laude.

Kim clerked for the Honorable Cecil F. Poole on the U.S. Court of Appeals for the Ninth Circuit.

Following her clerkship, she was the Felix Velarde-Munoz Fellow and later a staff attorney at the Employment Law Center/Legal Aid Society of San Francisco, where she litigated cases involving race, sex and disability discrimination, racial and sexual harassment, and unlawful working conditions.

At the law school, Kim co-founded the Workshop on Empirical Research in the Law, an interdisciplinary faculty workshop at the University, and is affiliated with the Center for Empirical Research in the Law and the Civil Rights Clearinghouse.



Kim

Sports

Hall of Fame class of 2008 announced

Washington University, in conjunction with its athletic support organization, the W Club, has announced its 13th induction class for the WU Sports Hall of Fame.

This year's induction class features eight former student-athletes:

Kevin Folkl, class of 1996, basketball; **Stephanie Habif '97**, volleyball; **Chris Nalley '97**, football and track and field; **John Nelke '67**, cross country and track and field; **Emily Richard '99**, cross country and track and field; **Tasha Rodgers '01**, basketball; **Tim Spengler '86**, tennis; and **Rachel Sweeney '00**, soccer.

In addition, two former student-athletes will be honored as Distinguished Service members: **Hord Hardin '35**, football, golf, baseball and basketball; and **W. Edward Lansche '48**, basketball and track and field.

Induction ceremonies will be held during a breakfast at the Knight Center Feb. 6, 2009.

Later that day, the 2008 class will be recognized at halftime of the women's basketball game against New York University.

With the addition of the 2008 class, the WU Sports Hall of Fame boasts 132 members, including Distinguished Service honorees.

Women's soccer tied for first place in UAA

The No. 18 women's soccer team moved into a first place tie in the University Athletic Association (UAA) standings with a 2-0 victory over No. 11 Emory University Oct. 11 at Francis Field.

Senior Samantha Murphy and freshman Lee Ann Felder scored for the Bears.

Senior Amanda Boe picked up her fourth shutout of the season, making five saves.

WUSTL, which improved to 9-2-1 overall and 2-0 in the UAA, hosts New York University in a battle for first place in the conference Friday, Oct. 17, at 5:30 p.m.

Earlier in the week, WUSTL snapped the nation's longest winning streak with a 3-1 win at Principia College. Juniors Elyse Hanley, Becca Heymann and Caryn Rosoff each scored for the Bears. Boe made six saves in the victory.

Alberts is national player of the week

The No. 4 volleyball team posted a 4-0 record at the Washington University Invitational II in the Field House Oct. 10-11.

The Bears won all four matches by a score of 3-0, beating No. 23 Christopher Newport

University, Williams College, Endicott College and Illinois Wesleyan University.

Three Bears were named to the six-member all-tournament team: senior outside hitter Alli Alberts, senior setter Audra Janak and senior rightside attacker Nikki Morrison.

Alberts also was named the Sports Imports/American Volleyball Coaches Association National Division III Player of the Week Oct. 7. She became the 21st student-athlete in WUSTL history to earn the award and the first in over two years. Alberts led the Bears with 50 kills and a .384 attack percentage in the squad's 4-0 week from Sept. 29-Oct. 5.

WUSTL returns to action Saturday, Oct. 18, when it takes on No. 2 Emory University in a round-robin tournament in Waltham, Mass.

Football loses at home, falls to 3-2

Wabash College busted open a two-point halftime advantage with three touchdowns in a span of 12 minutes en route to the Little Giants' 37-12 victory Oct. 11 at Francis Field. WUSTL was limited to 221 yards of total offense on 49 plays.

The Bears fall to 3-2 overall and travel to Wooster, Ohio, to take on the College of Wooster.

For the Record

Of note

Yousef Abu-Amer, Ph.D., associate professor of orthopaedics, has received a five-year, \$1.1 million grant from the National Institute of Arthritis and Musculoskeletal and Skin Diseases for research titled "Mechanisms of IKK Regulation of Basal and Inflammatory Osteoclastogenesis."

Jeffrey G. Catalano, Ph.D., assistant professor of earth and planetary sciences in Arts &

Sciences, has received a two-year, \$50,000 grant from the American Chemical Society Petroleum Research Fund for research titled "Iron Oxide Morphology and Composition as Possible Indicators of Sedimentary Redox Cycling."

Joseph C. Corbo, M.D., Ph.D., assistant professor of pathology and immunology and of genetics, has received a five-year, \$1.9 million grant from the National Eye Institute for research titled "Quantitative Analysis and Engineering of the Photoreceptor Transcription Network."

Construction Update

Construction Update is published periodically and provides information about the progress of major building and renovation projects. Information is provided to the Record by facilities management.

Danforth Campus

Wohl Center replacement

This building is in the design and development stage. Food service mechanical, electrical and plumbing is being assessed for completion of design rough-ins. Utilities are being cleared to allow for mass excavation.

South 40 Umrath House

Piers are completed and tied, and grade beams are under way.

South 40 utilities

A contractor is completing boiler installation in Mudd and Danforth houses. Temporary boilers have been installed.

Busch Hall renovation

A contractor is doing plumbing, trenching and rough-in work in the lower level.

Medical Campus

BJC Institute of Health at Washington University (Biomedical Research Building 1)

Structural steel has been erected to the eighth floor on the south end of the building over the MetroLink tracks (with four floors to go) and has topped out at the sixth floor on the North-South Wing. The exterior skin has started on the northwest corner of the building. Construction on the labs will start this fall. The

Taylor to Euclid road work is under way and should be completed by December. The design and bids for the landscaped courtyard and streetscape are due at the end of 2008. Core and shell completion is scheduled for December 2009 with the WUSTL build-outs to follow.

Environmental, Health and Safety Building

Schematic design is under way for a new building to house the Environmental, Health and Safety functions, Radiation Safety, the Machine Shop and Building Services Shops. The building will be located in the 4500 block of McKinley. It will be three stories tall, structured for one future floor. Construction should start in spring 2009.

Obituaries

Phillip, 70

Lorna Marcelline Phillip, film librarian at the School of Medicine from 1971-79, died Friday, Sept. 26, 2008, at Strafford Care Center in Strafford, Mo. She was 70.

Ratliff, 57

Deborah L. Ratliff, staff nurse in the Department of Medicine's Division of Oncology, died Sept. 25, 2008, in St. Louis. She was 57.

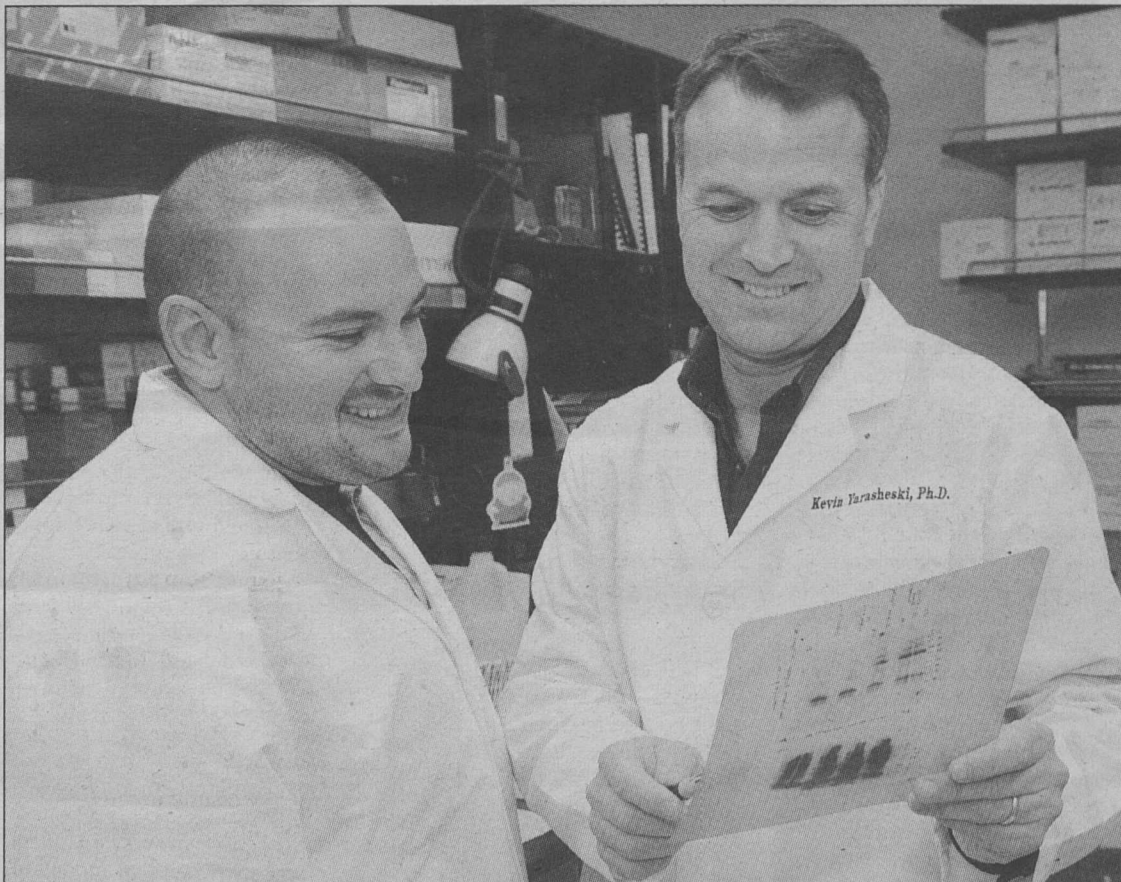
Washington People

He was born in central New Jersey, but Kevin E. Yarasheski, Ph.D., started moving west when he started college.

First it was to East Stroudsburg University in the Pocono Mountains of Pennsylvania, where he earned an education degree. Then he went farther west to Kent State University in Ohio, where Yarasheski earned both a master's degree and a doctorate in exercise physiology.

He says his decision to pursue science as a career began with an interest in the biochemistry of physical activity. Yarasheski longed to understand what happened inside muscles during exercise, what activity did to the heart, the liver and fat stored in the body. He knew a research fellowship could allow him to explore not just exercise but also the other things that interested him, too.

"During graduate school, my adviser, who was a pretty good biochemist, really stimulated my brain and got me excited about discovery, thinking outside the box, ignoring boundaries, and dared me to imagine new approaches and new possibilities," says the professor of medicine, of cell biology and physiology and of physical therapy. "I really became excited by bench research and understanding the molecular-level



Kevin E. Yarasheski, Ph.D. (right), reviews immunoblots in his lab with Scott Richmond, Ph.D., a post-doctoral scholar in the Division of Endocrinology, Metabolism and Lipid Research. "Kevin is a perfect example of the value of involving people with fresh perspectives to address difficult problems, something that makes Washington University such a unique community of scholars," says Clay Semenkovich, M.D., the Herbert S. Gasser Professor and chief of the Division of Endocrinology, Metabolism and Lipid Research.

By JIM DRYDEN

Excited about discovery

Yarasheski's skills lead to insights into cardiovascular problems in HIV patients

changes that explain disease."

After graduate school, he kept going west, heading to St. Louis for that postdoctoral fellowship. As he changed time zones, his career direction changed, too. By the time he arrived at the School of Medicine, his primary interests involved transitioning his skills from the bench to disease-oriented human research and scientific discovery.

That desire to transition and gain novel research and analytical skills helps explain how an exercise physiologist eventually came to work with mass spectrometry, stable isotopes and imaging techniques. Yarasheski regularly uses those tools and "many of the other nice toys they have here at Washington U." to better understand what goes wrong with the biochemical processes that regulate metabolism, body composition and cardiovascular function in people with HIV.

"I came here 22 years ago to learn and apply *in vivo* research techniques that would allow me to understand human biochemistry, and I've never left," Yarasheski says. "The stimulation is just too great. I like the idea of coming to work and knowing that we've got the potential to discover something new. That's what gets me out of bed every Monday morning and

keeps me excited about science."

When he arrived at the University, Yarasheski was working with colleagues interested in how human biochemistry changed as people got older. His research has evolved in the intervening two decades, and he now concentrates on how HIV infection affects the cardiovascular system and metabolism.

"Kevin is a perfect example of the value of involving people with fresh perspectives to address difficult problems, something that makes Washington University such a unique community of scholars," says Clay Semenkovich, M.D., the Herbert S. Gasser Professor and chief of the Division of Endocrinology, Metabolism and Lipid Research.

"Very few people could have predicted that successful treatment of HIV would lead to metabolic abnormalities associated with heart disease," Semenkovich says. "Kevin, with his background in human integrative physiology, has the ideal skill set to contribute new insights into an important problem."

Studying HGH

Those studies of the elderly looked at many different things, but under the direction of John O. Holloszy, M.D., professor of medicine, the group's primary focus was on interventions to slow or reverse frailty and metabolic problems associated with aging. Yarasheski says the projects paid important dividends in both scientific and personal ways.

As a scientist, he began to look at the effects of recombinant human growth hormone, often called HGH. He treated elderly people with HGH, gave it to younger people and measured its effects in the laboratory. His findings were — and remain — controversial. Yarasheski admits that in elite swimmers, for instance, when the difference between victory and defeat can be as narrow as .01 seconds, HGH might help performance. But those tiny differences are too small to measure in the laboratory.

"Study after study has shown

that in people who have normal levels of growth hormone, the advantages of HGH are small; they retain fluid, become mildly hypertensive and develop carpal tunnel syndrome, muscle and joint soreness," he says. "But as far as muscle strength and muscle performance go, growth hormone doesn't do anything, at least not anything that we can measure in the lab."

Growth hormone does help people who don't have normal HGH levels. Short-stature children, for instance, can grow taller with hormone treatments. Older people deficient in growth hormone also can benefit, but Yarasheski remains unconvinced that anyone with normal HGH levels really gets bigger, stronger or faster.

But as the debate about HGH raged in the scientific and the popular press, Yarasheski had turned his skills toward a different issue. He was learning about biochemical changes in the muscles of AIDS patients. Muscle wasting was one of the major problems that accompanied HIV infection, and he had studied wasting in the elderly during his first days at WUSTL.

"I wanted to understand the molecular reasons why HIV caused wasting," he explains. "When I first came here, we were looking at aging and asking why we lose muscle, why we become resistant to insulin and why we become obese as we age. HIV infection was just a different model for looking at many of the same questions."

But then protease inhibitor therapy was introduced, and wasting from AIDS became very rare.

"It disappeared, but with longer survival came more diabetes and more problems with cholesterol and more bone loss and abdominal obesity," he says. "We're at the point now where we want to know why the cardiovascular system isn't regulated properly in these patients and what we can do in an HIV-infected person who has these cardiovascular disease risk factors."

Family life

The other dividend from those early days at WUSTL was much more personal. He met his future wife, Jill, at a division holiday party.

"We dated for, I don't know,

20 years, 30 years, something like that," he jokes. "I was so devoted to scientific discovery that I put marriage and all that kind of stuff on hold."

It wasn't really that long, but they certainly qualify for a lengthy courtship. The two met in 1986. They were married in 1995. Their son, Kai, came into their lives about seven years ago. Kai is a nickname. He's named after Jill's and Kevin's grandfathers: Curtis Alexander Yarasheski.

Although Yarasheski's trek led him westward from New Jersey to St. Louis, most of the rest of his family went south. One brother remains in New Jersey, but his parents, Edward, a high-school math teacher, and Elsie, a pharmaceutical industry worker, retired to the Raleigh-Durham area of North Carolina. Two sisters and another brother also relocated there. And Kevin, Jill and Kai visit every spring.

"First, we visit the relatives, and then we head straight to Topsail Beach down near Wilmington, North Carolina," he says. "We do a lot of walking and hiking on the beach, and we love to catch (and release) crabs and flourer, and we kayak the Intracoastal Waterway. You may have noticed how big my muscles are from all of the kayaking that we do."

As he laughs about his physique, he also notes that his kayaking is in no way aided by HGH ... not that it would help.



The Yarasheski family: (from left) Jill, Kai and Kevin.

Kevin E. Yarasheski

Born: May 17, 1958, in Somerset, N.J.

Education: B.A., education, 1980, East Stroudsburg University; M.A., exercise physiology, 1984, Ph.D., exercise physiology, 1986, Kent State University

University position: Professor of medicine, of cell biology and physiology and of physical therapy; assistant director, Biomedical Mass Spectrometry Research Resource

Family: Wife, Jill; son, Curtis Alexander (Kai), 7