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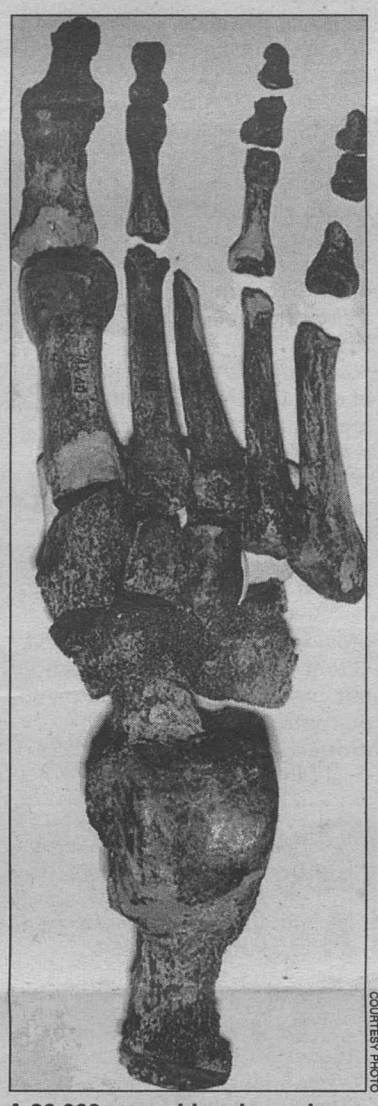


COURTESY PHOTO

A 26,000-year-old early modern human, "Dolni Vestonice 16," from the Czech Republic, had reduced strength of the bones of the lesser toes. It is one of three partial foot skeletons from Dolni Vestonice that shows reduced toe strength.

Protective footwear nearly 30,000 years old

By Neil Schoenherr

Those high-tech, air-filled, light-as-a-feather sneakers on your feet are a far cry from the leather slabs our ancestors wore for protection and support.

But believe it or not, our modern-day Nikes and Reeboks are direct descendants of the first supportive footwear that new research suggests came into use in western Eurasia 26,000-30,000 years ago.

Erik Trinkaus, Ph.D., the Mary Tileston Hemenway Professor of Physical Anthropology in Arts & Sciences, derived those dates by analyzing anatomical evidence of early modern humans, which suggests a reduction in the strength of the smaller toes in Upper Paleolithic humans, while there was little change in leg strength.

Trinkaus' research was published in the July issue of the *Journal of Archaeological Science.*

He argues that early humans living in far northern climates began to put insulation on their feet around 500,000 years ago. While archaeological evidence suggests that protective footwear was in use by at least the middle Upper Paleolithic in portions of Europe, the frequency of use and the actual mechanical protection

See **Footwear**, Page 4

Wristband helps prevent wrong-site surgery

By Gwen Ericson

In the near future, an alarm sounding outside the operating room door may have surgeons reaching for their pens. That's because a device has been designed to alert the surgical team if a patient's incision site hasn't been marked.

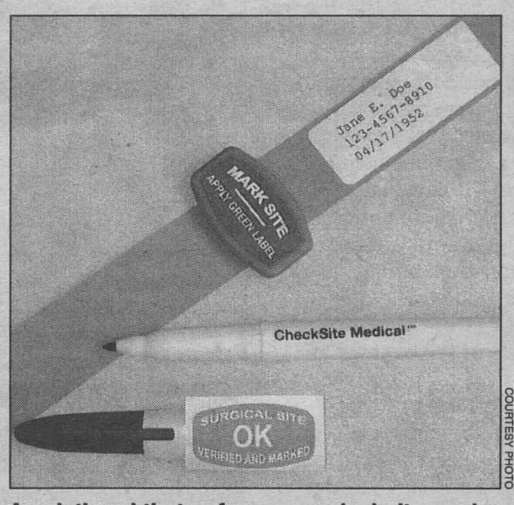
Invented by a School of Medicine physician, the device — a wristband that enforces surgical-site marking — should help eliminate wrong-site surgeries.

About 4,000 wrong-site surgeries take place in the United States each year — that's about one in 17,000 surgeries — and are the fifth most frequent life-threatening medical error.

Using a marker pen on the patient's skin to indicate the surgical site has become common practice in hospitals across the country.

Barnes-Jewish Hospital began requiring the practice three years ago. On July 1, 2004, the Joint Commission on Accreditation of Healthcare Organizations adopted a set of formal guidelines that established marking surgical sites as a nationwide policy.

"Even with the policy in place, wrong-site errors still do occur, and that's almost always because the surgical site hasn't been marked," said inventor Richard A. Chole, M.D., Ph.D., the Lindburg Professor, head of the Department of Otolaryngology and professor of molecular biology and pharmacology.



COURTESY PHOTO

A wristband that enforces surgical-site marking should help eliminate wrong-site surgeries. The device was invented by Richard A. Chole, M.D., Ph.D., the Lindburg Professor & head of the Department of Otolaryngology.

"Wrong-site errors stem from a breakdown in communication among the pre-op staff, the operating room staff and the patient or the patient's family. The device will help correct that."

Chole's invention consists of a wristband embedded with a miniature, disposable electronic device — like the anti-theft chips attached to consumer items — plus a marker pen with a specialized sticker that deactivates the chip.

When the surgeon or another designated staff member marks — in consultation with the patient or the patient's family — the patient's surgical site, the sticker is removed from the pen and placed on the patient's wristband to deactivate the chip.

If these steps aren't followed, the wristband will set off a detector placed in the hallway between the pre-operative area and the operating suite. The detector can be set up to give a visual or auditory signal and to page hospital personnel.

"It's a simple way to remind surgeons to mark the site," Chole said. "The band and pen are very simple to use and just add the small extra step of placing the deactivation sticker on the wristband."

Said nurse Edna Woods, a surgical services administrator at the Center for Advanced Medicine, "The system makes everyone more aware, and the wristband is a good way to get the patient engaged with the process, too."

A St. Louis-based company called CheckSite

See **Wristband**, Page 6

Future STARS: High-school students conduct research

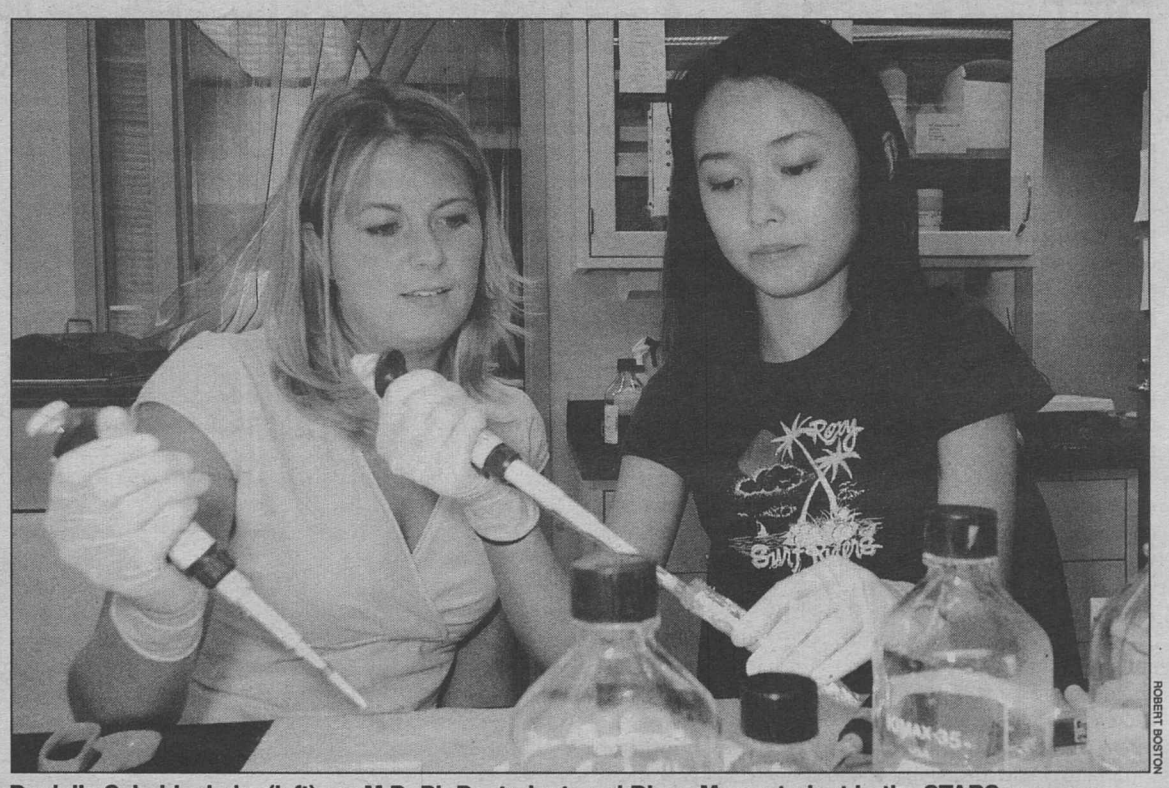
By Diane Duke Williams

Diane Ma, who will be a junior this year at Parkway South High School in St. Louis County, has always been interested in the brain and how it functions.

This summer, she participated in the 2005 Pfizer-Solutia Partnership of Universities' Students and Teachers as Research Scientists (STARS) program for gifted high-school students.

In the program, Ma delved into the inner workings of brain tumors, which are common in children who have a genetic disorder called neurofibromatosis type 1 (NF1). She conducted research in the laboratory of David H. Gutmann, M.D., Ph.D., the Donald O. Schnuck Professor of Neurology and director of the University's Neurofibromatosis Center.

The majority of brain tumors in humans are caused by an abnormal proliferation of cells called astrocytes. Working with Danielle Scheidenhelm, an M.D.-Ph.D. student, Ma analyzed the cytoskeleton of astrocytes engineered to lack *Nf1* gene expression. The cytoskeleton gives the cell its shape and is important for a variety of properties of tumor cells, including how fast the cells divide and how they move.



ROBERT BOSTON

Danielle Scheidenhelm (left), an M.D.-Ph.D. student, and Diane Ma, a student in the STARS program, prepare solutions for their studies of the cytoskeleton. The STARS program pairs junior and senior high-school students with research mentors from WUSTL, the University of Missouri-St. Louis and Saint Louis University for six weeks each summer.

Ma learned that when *Nf1*-deficient astrocytes were maintained under conditions that were not permissive for cell growth, the cytoskeleton resembled that of normal cells that were treated with growth-promoting factors. These results suggest that astrocytes in individuals with NF1 may continue to proliferate, even

See **STARS**, Page 6

Students, faculty go overseas to teach teenagers in Georgia

By Neil Schoenherr

Many college students spend their summer relaxing, taking a few classes or working a summer job, but three members of the WUSTL community spent their time teaching English to 16 teenage members of the Azerbaijani minority in the former Soviet Republic of Georgia.

Joachim Faust, lecturer in International and Area Studies in Arts & Sciences, senior Aaron Weisman and junior Steve Lopatin were in Georgia for a four-week English language camp supported by the University and the U.S. Embassy in Georgia. They served as teachers, counselors and English conversation partners for a group of 13-15-year-olds.

"It was an absolutely amazing experience," Weisman said. "The kids were great to work with, as was the rest of the staff. It was also wonderful to see how far the kids' English proficiency had developed through the month."

The three WUSTL community members visited Georgia as part of a nongovernmental organization (NGO) called the International Initiative for Georgian Development (IIGD), started last year in cooperation with a Georgian student.

Essentially, any organization that deals with problems of public policy that is not part of the government is considered an NGO. Examples include Amnesty International, the American Civil Liberties Union and the World Wildlife Fund.

Faust, Weisman and Lopatin were in Tblisi, Georgia, last summer to participate in a seminar called "Emerging Democracy and Civil Society," taught by James V. Wertsch, Ph.D., the Marshall S. Snow Professor in Arts & Sciences and director of International and Area Studies.

During that time, the students, in cooperation with Georgian student Tamta

See **Georgia**, Page 6

School of Medicine Update

Cancer matters

Siteman reduces disparity in cancer care

BY GWEN ERICSON

Each day, 3,400 people in the United States are diagnosed with cancer and another 1,500 die from the disease.

And while these numbers are disturbing, they also harbor a fundamental inequity: Racial and ethnic minority groups form a larger percentage of these totals than their proportions in the general population.

Since its inception in 1999, the Siteman Cancer Center has implemented highly successful strategies for reducing such disparities in cancer care.

From 2000-04, African-American participation in Siteman breast cancer studies went from 10 percent to 28 percent. In the St. Louis metro area, African-Americans comprise about 18 percent of the population.

On the basis of Siteman's success in increasing participation of underserved groups in its research and medical services, the National Cancer Institute (NCI) has awarded the center a five-year, $1.25 million grant to support its Program for the Elimination of Cancer Disparities (PECaD).

Siteman was one of 25 institutions nationwide to receive a grant from NCI's Community Networks Program.

In addition, Siteman's Breast Imaging Team recently received recognition from the American Society of Clinical Oncology (ASCO), the world's leading professional organization representing physicians who treat cancer.

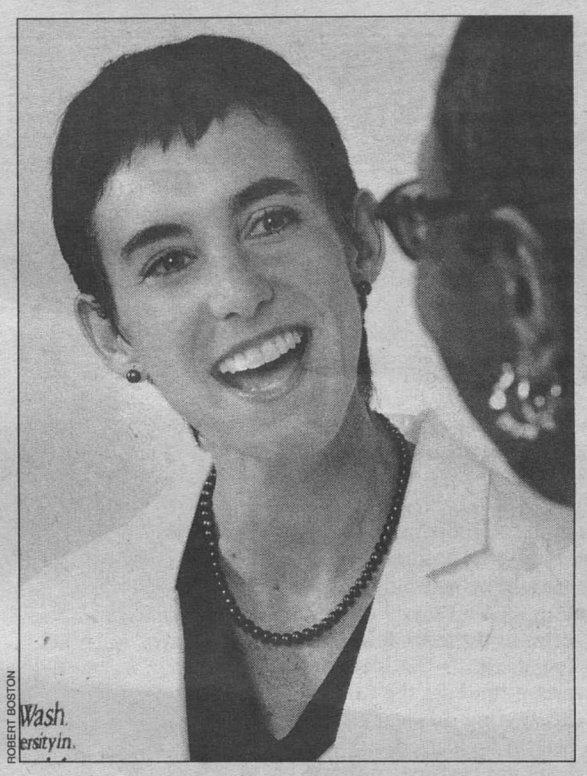
ASCO presented the Breast Imaging Team with one of its 12 annual Clinical Trials Participation awards because of its outstanding success in recruiting minority members to clinical trials, which are vital to improving cancer care.

Siteman's strategies are based on enhancing awareness among underserved patients by expanding working partnerships with local community organizations.

These organizations help the center spread the word about cancer risks, screening options, funding programs and referral centers in non-threatening ways. Siteman has made this grassroots model one of the most successful efforts in the country at reducing cancer-care disparity.

Siteman's efforts to reduce imbalances in care are now coordinated by PECaD. The program is directed by Katherine Jahnige Mathews, M.D., assistant professor of obstetrics and gynecology and physician at ConnectCare, part of the St. Louis region's health-care safety net, and Dione Farria, M.D., assistant professor of radiology.

PECaD monitors Siteman's research, clinical and policy initiatives as well as overseeing outreach programs. Siteman strives to improve cancer care for underserved people in general — in the St. Louis area that includes rural, low-income and immigrant populations as well as minority populations.


ROBERT BOSTON

Katherine Jahnige Mathews, M.D., discusses cancer care with a patient at the Siteman Cancer Center. Mathews and Dione Farria, M.D., direct the Program for the Elimination of Cancer Disparities at Siteman.

"We build relationships with people by working within existing community networks," Farria said. "By making personal connections, we are beginning to establish the trust that attracts patients to our clinical trials. At the same time, we disseminate health information, and we help people get the care they need."

As it developed outreach strategies, Siteman began with a focus on breast cancer. It introduced breast-cancer programs that involved local church groups and other community-based organizations and used a mammography van to reach underserved people in their neighborhoods.

Siteman members distributed health information in accessible and innovative ways and mined sources of funding on behalf of women of limited means.

As a result of Siteman's initiatives, for example, 3,500 uninsured women were screened for breast cancer. Subsequently, 100 of these women were diagnosed with breast cancer and received treatment at Siteman.

The NCI grant will enable expansion of PECaD's infrastructure, which in addition to adding staff will include forming a corps of volunteers who go out into the community.

It will also allow PECaD to add new and enhance existing community partnerships and to educate staff, researchers and clinicians about health-care disparities.

The funding also provides a chance to collaborate more closely with other NCI-funded institutions such as Saint Louis University School of Public Health's Center of Excellence in Cancer Communications Research, headed by Matt Kreuter, Ph.D.

A program to reach those living in areas of Missouri's Bootheel region has begun, and Siteman researchers are studying whether personal "navigators" who guide patients through the steps involved in cancer treatment will aid in reducing disparities by making the process less intimidating.

"Breast cancer outreach has provided a prototype," Farria said. "From what we've learned from our experience, we plan to expand our outreach in the areas of prostate, lung, colorectal and cervical cancers."

Cancer research grant seeks junior faculty

Applications are being accepted for the University's American Cancer Society Institutional Research Grant.

The program provides seed money for new projects initiated by junior faculty members. Awards of up to $20,000 will be made for one year.

Eligibility is limited to faculty who are within six years of their first independent research or faculty appointment.

Each application must include a letter from the department chair verifying that the applicant is an independent investigator.

Applications are due Sept. 26. For more details, go to *siteman.wustl.edu/physcian/research/funding.shtml.*

PET scans detect more vaginal cancer than CT scans

BY GWEN ERICSON

In patients with vaginal cancer, PET (positron emission tomography) scans detected twice as many primary tumors and cancerous lymph nodes as did CT scans, according to University researchers.

At this time, however, Medicaid, Medicare and many private insurers specify CT (computed tomography) for diagnosing and monitoring this cancer.

The researchers — hoping to encourage a change in that standard — reported their comparison of the two methods in a recent issue of the *International Journal of Radiation Oncology.*

Like cervical cancer, vaginal cancer advances predictably, spreading to lymph nodes increasingly higher up in the body as the disease progresses.

Doctors use information about the size of the tumor and the involvement of lymph nodes to determine treatment, such as where to target radiation and whether to use surgery or chemotherapy.

The results of this study suggest that the use of PET scans would make diagnosis of vaginal cancer much more accurate and allow better selection of treatment, according to study author Perry W. Grigsby, M.D., professor of radiation oncology and of radiology.

However, until the procedure is reviewed and approved by the Centers for Medicaid and Medicare Services (CMS), vaginal cancer patients will most likely not be evaluated using PET scans.

CMS policies set standards often followed by private health insurance companies and therefore strongly influence what procedures physicians use. Studies such as this one play an essential role in CMS acceptance of new procedures.

"In 1999, we began publishing papers showing that PET scans picked up more cancerous lymph nodes in patients with cervical cancer," Grigsby said.

Armed with data from these kinds of studies, Grigsby went to Washington, D.C., in 2003 to petition CMS to approve the use of PET scans for diagnosis of cervical cancer. In January of 2005, the procedure was approved for cervical cancer.

Several other cancers, in addition to cervical cancer, can be diagnosed and monitored using PET scans as the result of CMS acceptance.

Grigsby now works to persuade CMS that PET scans will improve the diagnosis and treatment of vaginal cancer.

"CT scans are useful in many cases, but they have a limit to their resolution," Grigsby said.

"When you're evaluating lymph nodes for cancer using CT, the node has to be at least a centimeter for it to be considered abnormal. But PET scans can detect much smaller nodes that have cancerous cells."

PET scans are effective for this purpose because they use a different detection method than CT scans.

CT scans obtain cross-sectional views of the body by detecting the amount of X-rays that pass through the body's tissues.

Small tumors can easily escape detection.

On the other hand, PET scans detect radioactivity that emanates directly from a tumor after a patient has received a dose of radioactive glucose, which accumulates in tumors.

Even tiny tumors will collect enough "hot" glucose to show up on the PET scan.

Vaginal cancer is very similar to cervical cancer; both are linked to the presence of human papillomavirus. About 1 percent of gynecological malignancies are vaginal.

The rates of survival with vaginal cancer are considered to be similar to those of cervical cancer.

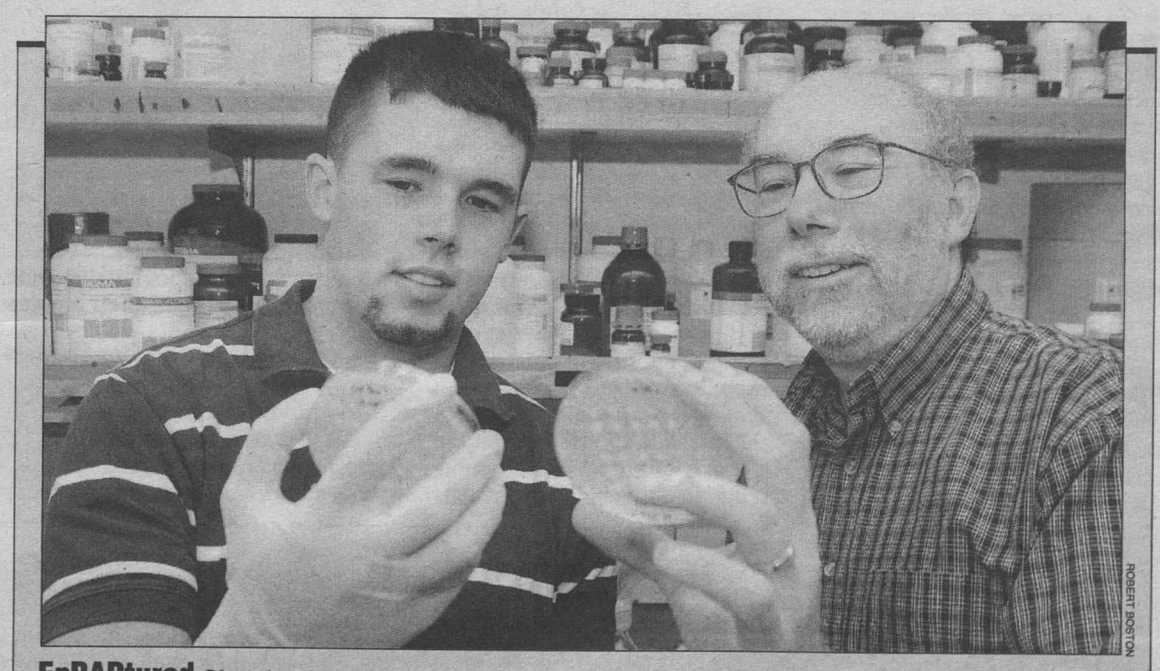
According to Grigsby, if cervical cancer has not spread beyond its primary site, about 90 percent of patients will survive.

The rate of survival drops to 70 percent if the cancer has spread to lymph nodes in the pelvis.

The next stage of progression, in which the cancer has spread to nodes near the heart, has a survival rate of 30 percent to 40 percent.

After that, untreated cervical cancer will move to nodes near the collarbone and will not be survivable.

"It is very important to know at the time of diagnosis, for both cervical and vaginal cancer, not only what the patient has in the pelvis, but also where the tumor has spread," Grigsby said. "That will absolutely determine the kind of treatment."


ROBERT BOSTON

EnRAPtured Chemistry and biology undergraduate student Brent Cameron (left) studied prions, misfolded proteins linked to some human neurodegenerative disorders, this summer in the laboratory of David Harris, M.D., Ph.D., professor of cell biology and physiology. Cameron came to Harris' lab from Pittsburgh State University through the Biomedical Research Apprenticeship Program (BioMed RAP), which annually brings approximately 15 talented undergraduate students to campus for 10 weeks of research in the labs of WUSTL faculty mentors. The program particularly encourages participation of students from minority groups who are traditionally underrepresented in biomedical research. At the end of the program, Cameron and other BioMed RAP students presented their scientific results at a poster session and attended an awards luncheon. During the summer, students also participated in a variety of presentations and programs designed to help prepare them for graduate study in the biomedical sciences. BioMed RAP is part of the diversity efforts of the Division of Biology and Biomedical Sciences; Harris chairs the Diversity Steering Committee and is the director of BioMed RAP.

School of Medicine Update

Process enables powerful immune attack cells

BY MICHAEL C. PURDY

Scientists have discovered that a group of important immune system cells has a surprising resemblance to cinematic British superspy James Bond: The cells receive a "license" that allows them to unleash their most potent attacks on enemies.

This licensing process apparently helps reduce the chances that the cells will erroneously direct their firepower at the body's own tissues, according to School of Medicine researchers.

The process is very different from other previously identified ways that help immune cells distinguish invaders from self, and it could have important implications for doctors struggling to understand such issues as persistent viral infections and patients' responses to bone marrow transplants.

The findings were published in the Aug. 4 issue of *Nature*.

The immune cells in question already evoked connections to Special Agent 007 simply by virtue of one of their names: Scientists commonly refer to them as "natural killer cells."

The cells rapidly attack invaders and are continually generated in the bone marrow, leading to replacement of the entire population approximately once a week.

Yokoyama

Scientists led by Wayne M. Yokoyama, M.D., the Sam J. Levin and Audrey Loew Levin Professor of Research in Arthritis, and professor of medicine and of pathology and immunology, discovered through experiments in mice that the arsenals of natural killer cells only become fully armed after a receptor on their surfaces interacts with a molecule on the surfaces of other cells.

The molecular details of the process were so unusual that Yokoyama and his colleagues found themselves struggling to develop terms to describe it.

"So many other terms that might have been appropriate — education, tolerance, instruction, selection — already have specialized meanings in immunology that really aren't appropriate for this unique process we've discovered," said Yokoyama, who also is a Howard Hughes Medical Institute Investigator and chief of the Division of Rheumatology.

"Many of these terms refer to processes with a similar outcome — improved ability to distinguish between self and non-self — but this is a very different way of reaching that goal. So we came up with the term 'licensing.'"

Their results include another ironic connection to the world of cinema spies: The molecular details of the process feature a player who is comparable to a double agent.

Scientists have known for some time that natural killer cells have inhibitory receptors on their surfaces.

The natural killer cells' ability to attack is inhibited when these receptors encounter a molecule known as major hiscompatibility complex (MHC) class I on the surface of other cells.

> **"This could be an important advance both conceptually and in terms of clinical practice. It could also help us match bone marrow transplants in a way that increases the immune system's ability to fight off a relapse of leukemia."**
>
> WAYNE M. YOKOYAMA

MHC serves as a kind of molecular I.D. badge, helping the natural killer cells to distinguish the self from an invader.

But Yokoyama's group found that the inhibitory receptors switch roles during licensing. Although the structure of the receptors is exactly the same in immature natural killer cells, they act not as inhibitors but as enablers.

In the researchers' studies, natural killer cells in mice became much more capable of mounting attacks against invaders after they first encountered the mouse version of MHC.

"The structure of these receptors on human natural killer cells is different from the mouse version, but they have a similar function," said lead author Sungjin Kim, Ph.D., research instructor in rheumatology.

"We will be looking for a way to see if the human version also participates in some kind of licensing process."

The group's research was made possible by a unique mouse line created by Ted H. Hansen, Ph.D., professor of pathology and immunology and of genetics.

Mice normally have many different versions of the MHC molecule, but Hansen created a line that makes only one.

This was essential to the ability of Yokoyama's group to test its hypothesis.

The new findings from Yokoyama's laboratory could explain some puzzling outcomes in the clinic, including why some patients with hepatitis C infections can be cured while other patients have lifelong chronic infections.

"This could be an important advance both conceptually and in terms of clinical practice," Yokoyama said.

"It could also help us match bone marrow transplants in a way that increases the immune system's ability to fight off a relapse of leukemia."

Irregular heart rhythm treatment shows promise

BY GWEN ERICSON

Atrial fibrillation, one of the most common and least manageable post-operative complications of heart surgery, may soon have an effective treatment.

In laboratory tests in dogs, School of Medicine cardiac researchers have found treatment with anti-inflammatory drugs after heart surgery may lessen or prevent atrial fibrillation.

The findings were reported in a recent issue of *Circulation*.

Atrial fibrillation — a rapid, irregular twitching of the upper chambers of the heart — occurs in a quarter to a half of patients who undergo heart surgeries such as coronary bypass or valve replacement. The condition can lead to serious post-operative complications, including congestive heart failure or stroke.

"Patients have suffered post-operative atrial fibrillation since the early days of cardiac surgery, and while beta-blockers (drugs used to prevent abnormal heart rhythms) seem to reduce the incidence, there has been no cure," said senior author Ralph Damiano Jr., M.D., the John Shoenberg Professor of Surgery. "Our research suggests inflammation is the cause of post-operative atrial fibrillation, and this gives us new options for preventative therapy."

The researchers investigated the effects of heart surgery in dogs. They found that the severity of atrial fibrillation corresponded to the amount of inflammation in surgically treated heart tissue.

Inflammation led to changes in the electrical properties of the atria.

The inflammatory response consists of alterations in blood flow, increased permeability of blood vessels and escape of cells from the blood into the tissues. It is a normal response of tissue to injury that speeds the healing process in most instances.

"We found that inflammation led to non-uniform conduction of electrical impulses in the atria," Damiano said. "There were areas of very slow conduction and areas of normal conduction. The result was chaotic contractions of the atria."

Anti-inflammatory therapy increased the uniformity of the conduction of electrical impulses and decreased the incidence of atrial fibrillation.

The researchers will continue their studies in dogs and attempt to block inflammation of the heart tissue while preserving the normal inflammatory response in the rest of the body.

"Our hope is that we can soon bring this treatment to the operating room and eliminate one of the major complications of heart surgery," Damiano said.

African-Americans may suffer more arthritis pain

BY MICHAEL C. PURDY

A pilot study comparing the results of treatment for rheumatoid arthritis in African-Americans and Caucasians has revealed that African-Americans are more likely to suffer pain and disability from the disorder.

University researchers used questionnaires, physical examinations and laboratory tests to assess symptoms and disability levels in 33 African-Americans and 67 Caucasians.

"Both disease activity and the resulting disabilities were worse in African-Americans," said senior investigator Richard D. Brasington, M.D., associate professor of medicine.

"Further analysis of our results showed that this was linked primarily to their socio-economic status, not to their race."

Differences in insurance status — whether a patient had private insurance or public insurance — did not seem to influence patient outcomes.

However, many of the African-American patients had lower scores in self-efficacy, a characteristic that describes a patients' belief in his or her ability to control or otherwise have a positive effect on disease symptoms.

Earlier studies highlighted poor outcomes and low self-efficacy scores among African-American patients with other chronic diseases such as lupus and scleroderma.

Brasington couldn't find any information on disparities in outcome for the rheumatoid arthritis patients he sees.

Therefore, he decided to conduct his own study.

"The sample size was small, but before doing a study with hundreds of people it makes sense to see if we could produce some tentative evidence that a difference in outcome does indeed exist," he said.

"And it's important to note that, at least in our community, African-Americans with rheumatoid arthritis aren't doing as well."

Rheumatoid arthritis afflicts approximately 2.1 million Americans.

Women are 2-3 times more likely to develop the disorder than men.

Rheumatoid arthritis has long been recognized as an autoimmune condition, which involves defensive cells in the body's immune system mistakenly attacking healthy body tissues.

Symptoms, which often occur in episodic bursts, include morning stiffness, fatigue and joint and muscle pain.

In severe cases, rheumatoid arthritis can damage cartilage, tendons, ligaments and bone, leading to joint deformity and instability.

Patients are typically treated with a mixture of medications to reduce inflammation and control pain.

Brasington suggests that doctors should try to boost the belief of African-American patients that they can take steps to control their disease and decrease the symptoms.

"We can't really do much about our patients' socio-economic status, but we could focus some effort on improving self-efficacy," Brasington said.

"The Arthritis Foundation, for example, offers a formal class called the 'Arthritis Self-help Course' that can improve self-efficacy, and this has been linked to reductions in some measurements of disease activity."

As a result of the pilot study, Brasington and his colleagues have become involved in a multicenter study of early rheumatoid arthritis in African-Americans.

RAY MARKLIN

Star players St. Louis Rams coach Mike Martz (right) presents John C. Morris, M.D., the Friedman Distinguished Professor of Neurology, with a jersey at the dedication of a research laboratory named for Martz's mother, Betty, who died of Alzheimer's disease. The Betty Martz Laboratory for Neurodegenerative Research provides technology and expertise essential to the research programs of many different scientists. The lab specializes in neuropathology, the study of human brain tissue to diagnose and understand nervous system disorders like Alzheimer's disease. Funds from the Betty Martz Memorial Fund for Alzheimer's Disease Research and the Make-A-Wish Foundation paid for the renovation of the lab. Morris also directs the University's Alzheimer's Disease Research Center.

Economist Ping Wang to hold Seigle Family Professorship

BY BARBARA REA

Internationally renowned economist Ping Wang, Ph.D., has been named the inaugural holder of the Seigle Family Professorship in Arts & Sciences and will be installed in a ceremony later this school year.

The professorship was established by University Trustee and alumnus Harry Seigle, who wished to honor his family, many of whom also are alumni.

In announcing the gift, Chancellor Mark S. Wrighton noted Seigle's generosity.

"Harry Seigle is a great citizen of our University community and has been enormously generous in his support of programs, scholarships and facilities," Wrighton said. "Now he has added another major gift, this time for faculty support. We are extremely grateful for his significant contributions to Washington University and to its legacy."

Wang comes to WUSTL from Vanderbilt University to chair the Department of Economics in Arts & Sciences.

"Ping Wang brings distinction and a broad-based background in economics to Washington University," said Edward S. Macias, Ph.D., executive vice chancellor, dean of Arts & Sciences and the Barbara and David Thomas Distinguished Professor in Arts & Sciences.

"We are delighted to attract someone of his stature to Arts & Sciences. His experience in teaching, research, administration and service to the discipline are exceptional assets for our Department of Economics."

Wang earned a bachelor's degree in ocean transportation from the National Chao Tung University in Taiwan; two master's degrees in economics, from National Chengchi University in Taiwan and the University of Rochester; and a doctorate, also from Rochester.

Among his areas of expertise are economic theory, macroeconomics, monetary economics, health and social economics, growth and development, and spatial economics.

While holding posts at Pennsylvania State University and later at Vanderbilt, where he became a full professor in 1999 and chaired its economics department from 2002-05, Wang served in many visiting capacities, including the research arm of the Federal Reserve Banks of Dallas and Atlanta. In addition, he has held visiting positions at Purdue University, Rochester, the University of Washington and Tilburg University in the Netherlands.

From 2001-03, he was a visiting scholar at the International Monetary Fund Institute, and since 1994, a scholar at the Academia Sinica in Taiwan. Since 2001, he has served as a research associate for the National Bureau of Economic Research.

A prolific researcher, his work has been published widely in scholarly journals, including *American Economic Review*, *International Economic Review*, *Journal of Monetary Economics*, *Journal of Economic Theory*, *Review of Economic Studies* and *Review of Economics and Statistics*. He has edited a book and has contributed to several others.

Furthermore, Wang has refereed, or served on editorial boards, for a number of major academic journals. He is active in his field's professional organizations and is a frequent presenter at conferences.

Seigle graduated from Washington University with an undergraduate degree in political science in 1968, which was followed by law school at Northwestern University.

He practiced law until 1974, when he joined the family business, known then as Elgin Lumber Co. and known now as Seigle's Inc.

Under his direction, the company has become Chicago's largest building material supplier to the residential construction industry, employing 1,240 individuals in 11 locations. With Seigle as chairman, the company also is an industry leader in carpentry subcontracting.

He also runs the family's foundation, which supports local not-for-profit organizations and scholarships for deserving students.

A dedicated and unflagging supporter of his alma mater, Seigle serves as a member of the Arts & Sciences National Council and as founding chair of the Chicago Regional Cabinet. During the Campaign for Washington University, he chaired the Chicago Regional Campaign and served as national vice chair of the regional campaigns.

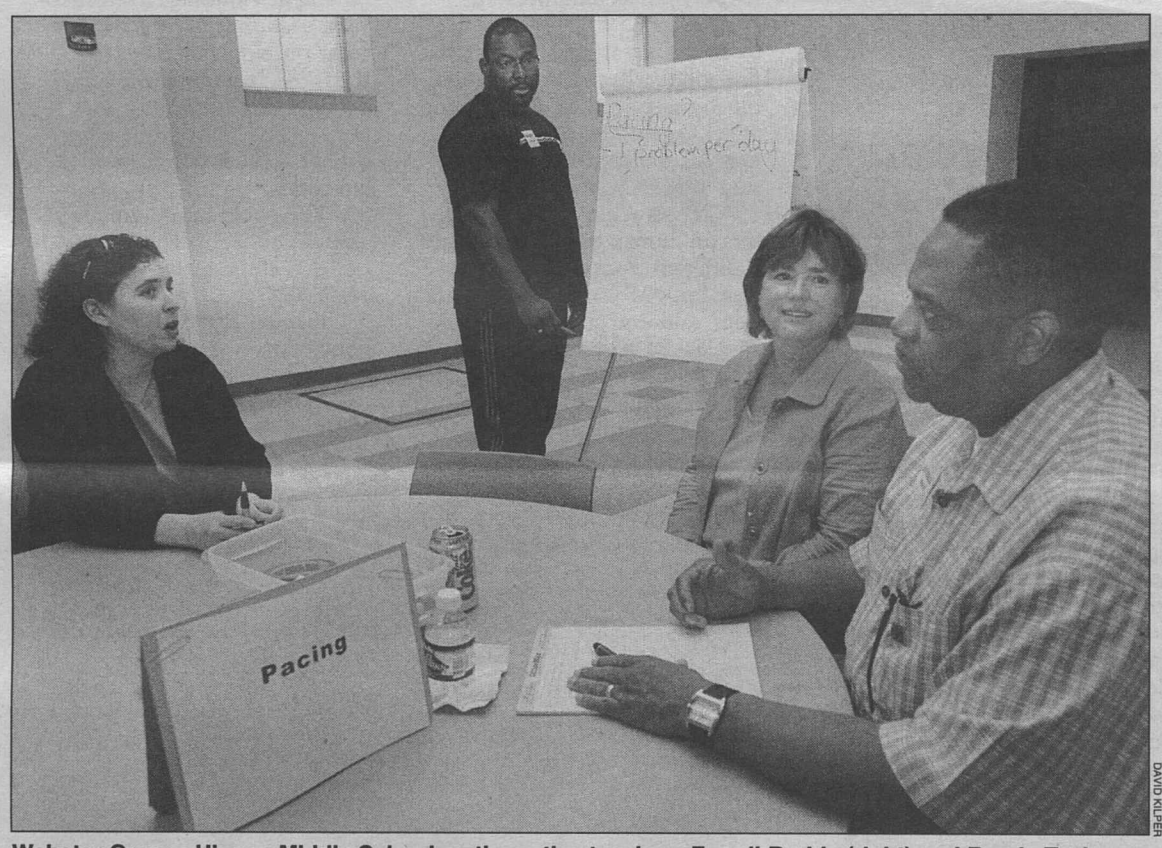
The Chicago Regional Cabinet recognized him with the Chicago Regional Award in 2003.

The University is a family affair for the Seigles. He and his wife, Susan Gilbert Seigle, have three sons, two of whom are graduates in Arts & Sciences. Joe, a real estate developer, graduated earlier this year; Max, a news broadcaster, graduated in 2000. Harry Seigle's brother, Michael, also is an alumnus.

His contributions over the years include the Arts & Sciences Scholarship Program and the establishment of the Seigle Seminar in American Cultural Studies in Arts & Sciences.

Seigle Commons in The Village is named in recognition of his support for facilities during the campaign.

He received a Distinguished Alumni Award in 2003.



DAVID KILPER

Webster Groves Hixson Middle School mathematics teachers Ferrell Roddy (right) and Randy Taylor (standing) discuss pacing students through an entire year of a special mathematics program called the Connected Math Program (CMP) with Francis Howell Middle School mathematics teacher Melissa Lenger (left) and Victoria May, WUSTL director of science outreach. Middle-school mathematics teachers worked with May and other science outreach personnel on mathematics curriculum strategies in a series of focus discussions. May said the goal is to establish a regional network of teachers to promote dialog and focus on increased rigor in implementing the CMP curriculum.

Back to school

NSF grant helps teachers connect their learning to the classroom

BY DANA BENEDICKTUS

More than 100 elementary- and middle-school teachers have been working with Washington University this summer to learn math and science instruction at a graduate level.

Through a National Science Foundation grant, the University is extending teachers' learning, providing post-course meetings on district curricula and purchasing materials that schools often can't afford. The additional time and resources help teachers customize learning for their own classrooms and students.

Customizing means that graduate courses, held in an intensive format in June, were just the beginning of a summer of hard work. The visiting teachers participated in courses on math and science instruction.

Then teachers returned to campus in grade-level groups, to work on a specific unit with their own district's textbooks.

Elaine Laura, a University City math teacher, joined meetings at the University in July.

"We are working as partners with the districts. We say, 'What is your plan for curriculum, for teacher workshops?' And then we fill in the gaps and provide training and materials that are beyond their budgets."

VICTORIA MAY

"I feel as though we have enough time to go over the material," Laura said. "The way this is presented, you think, 'I can do this in my class!' You can follow through in a way that kids will take ownership."

Teachers from the Riverview Gardens and Ferguson-Florissant school districts met at Little Creek Nature Area in July to develop lessons around science kits provided by the grant.

Ferguson Middle School science teacher Barb Rain returned for her third summer working with the University, this time on a geology unit.

"It keeps getting better and better," Rain said. "Finally this year, we realized how helpful the course has been. Teachers never have time to do this. But we know our kids, so we know how to set it up to work."

Victoria May, WUSTL director of science outreach, said, "We are working as partners with the districts. We say, 'What is your plan for curriculum, for teacher workshops?' And then we fill in the gaps and provide training and materials that are beyond their budgets."

May is director of the St. Louis Math and Science Partnership project, which provides programs designed to improve student achievement in math and science in the school districts of Maplewood-Richmond Heights, Ferguson-Florissant, Riverview Gardens, University City and Webster Groves. Grant activities will affect more than 3,000 students in 2005-06.

For more information, contact May at 935-6846 or vmay@wustl.edu.

WUSTL's undergrad programs ranked 11th by *U.S. News*

BY NEIL SCHOENHERR

Washington University — consistently ranked among America's 20 best national universities — has been ranked 11th for undergraduate programs among the nation's best 248 national universities by *U.S. News & World Report*. Last year, WUSTL was tied for 11th.

"We appreciate the impressive recognition we have received as one of America's finest universities," Chancellor Mark S. Wrighton said. "Our resolve to continue to improve will serve well our current and future students.

"Enhancing the student experience and providing the best scholarly environment will enable us to continue to attract and retain the best faculty and staff so vital to a great university."

This year's results, published in the Aug. 29 edition of *U.S. News* and its *America's Best Colleges* guide, rank WUSTL fourth in financial resources; fifth in faculty resources (an increase of one spot over last year's rankings); sixth in selectivity (an increase of two spots); and ninth in alumni giving.

WUSTL ranks 10th in highest proportion of classes under 20 students; 20th in the best values category; and 17th in graduation and retention (an increase of two spots).

The Olin School of Business undergraduate program is ranked as the 12th-best business school, tied with Cornell and Purdue universities, and also the universities of Illinois, Minnesota and Wisconsin.

The School of Engineering & Applied Science undergraduate program is ranked 41st, tied with seven other schools, including Dartmouth College, the University of Notre Dame, Yale University and Vanderbilt University.

The *U.S. News* undergraduate rankings are derived from peer assessments by university chief executive officers, provosts and admissions deans, as well as from data gathered from each institution.

These data are broken down into categories and assigned a weight reflecting the magazine's judgment about which measures of quality matter most.

A complete list of the rankings is posted on the publication's Web site, *usnews.com*.

A complete list of the most current rankings for all WUSTL schools, departments and programs is available online at *news-info.wustl.edu/rankings*.

U.S. News rankings

U.S. News & World Report undergraduate programs:

1. (tie) Harvard, Princeton
3. Yale
4. Penn
5. (tie) Duke, Stanford
7. (tie) Caltech, MIT
9. (tie) Columbia, Dartmouth
11. WUSTL
12. Northwestern
13. (tie) Cornell, Johns Hopkins
15. (tie) Brown, Chicago
17. Rice
18. (tie) Notre Dame, Vanderbilt
20. (tie) Emory, U.C.-Berkeley

Footwear

– from Page 1

provided by that footwear was unclear.

Use of protective footwear has been difficult to document because in most cases the footwear does not survive the test of time.

Lacking such physical evidence, Trinkaus analyzed the foot bones of western Eurasian Middle Paleolithic and middle Upper Paleolithic humans. In doing so, he found the anatomy of their feet began to change starting around 26,000 years ago.

"I discovered that the bones of the little toes of humans from that time frame were much less strongly built than those of their ancestors, while their leg bones remained large and strong," Trinkaus said. "The most logical cause would be the introduction of supportive footwear."

During barefoot walking, the smaller toes flex for traction, keeping the toe bones strong. Supportive footwear lessens the roll of the little toes, thus weakening them.

Jobs for new college grads on the rise

BY NEIL SCHOENHERR

There's good news for recent college graduates.

According to Mark W. Smith, J.D., assistant vice chancellor and director of The Career Center, students now will probably have a much easier time finding a job than their predecessors did in the past few years.

Smith says that overall hiring of college graduates is on the rise.

"It's a good time to be graduating," he said.


Smith

Sixty-one percent of employers responding to a National Association of Colleges and Employers survey said they expect to hire more college graduates in 2004-05 than they did in 2003-04.

Hiring in the Midwest is projected to have the largest increase — 15 percent over 2003-04 levels. Jobs for recent graduates are also on the rise in the Northeast and West.

"I think the economy is getting stronger and there is a better confidence level in the economy," Smith said. "Particularly with entry-level hiring, when the economy slows, companies would rather not hire a new employee than be forced to let a current employee go.

"People are also cautious after an economic decline and sometimes there can be a lag time before the hiring really starts picking up. I think there is more of a confidence level now."

While there are more jobs available, salaries have remained steady for entry-level positions. However, Smith said, that's not necessarily a bad thing.

"Sometimes when there are large increases in salary expectations, companies cut back on their hiring, especially entry-level hiring," he said. "I'd rather see salaries stable and have more jobs available."

While the Internet job explosion of the 1990s may have come and gone, Smith thinks the health-care industry will continue to be the next big thing.

"It's no secret that the baby boom generation is getting older," he said. "They will continue to need health care. Also, as older people are staying active longer, there is an increased need for medications and medical devices, as well as managers and health consultants, that can help that growing industry."

Smith said other popular career choices for recent grads include politics, public policy, consulting, law, communications, specialty retail and independent education.

"Politics, law, consulting, public policy and communications have long been popular majors," Smith said.

"College campuses have traditionally been hotbeds of political awareness and activism, which leads to an interest in those fields.

"Also, in the case of Washington University, hosting the presidential debate in October did much to bolster interest in political careers on campus."

As the nation's economy continues to rebound, Smith said traditional specialty retail stores will continue to hire and are looking for talented individuals to fill management positions.

"The demand for those jobs will remain high," he said.

Sports

Soccer team ranked preseason No. 11

The women's soccer team is ranked No. 11 in the NSCAA/adidas Division III Preseason top 25 Poll, as announced by the NSCAA. The Bears finished 2004 with a program-best 17-3-1 record and advanced to the NCAA Sectional Finals for the third time in school history.

WUSTL also won a share of its third University Athletic Association championship in school history.

Fourth-year head coach Wendy Dillinger has guided the Bears to a 41-11-7 (.754) record in three seasons, while claiming two UAA titles and making two NCAA Tournament appearances.

The Bears return 17 letter-winners and eight starters from last year's squad, including junior midfielders Talia Bucci and Meghan-Marie Fowler-Finn. Bucci, a first-team all-UAA selection in 2004, started all 21 games and recorded four goals and six assists. Fowler-Finn, a first-team all-UAA and Central Region honoree, led the Bears with 11 goals and 26 points in 2004.

WUSTL takes the field for its season opener at 1 p.m. Sept. 2 against No. 17 DePauw University in the Bob Baptista Invitational in Wheaton, Ill.

The Bears will face top-ranked Wheaton College (Ill.) the following day at 5 p.m.

Football team picked to win conference

The football team is once again the favorite to win the 2005 UAA championship, according to the Preseason Conference Coaches Poll that was recently released.

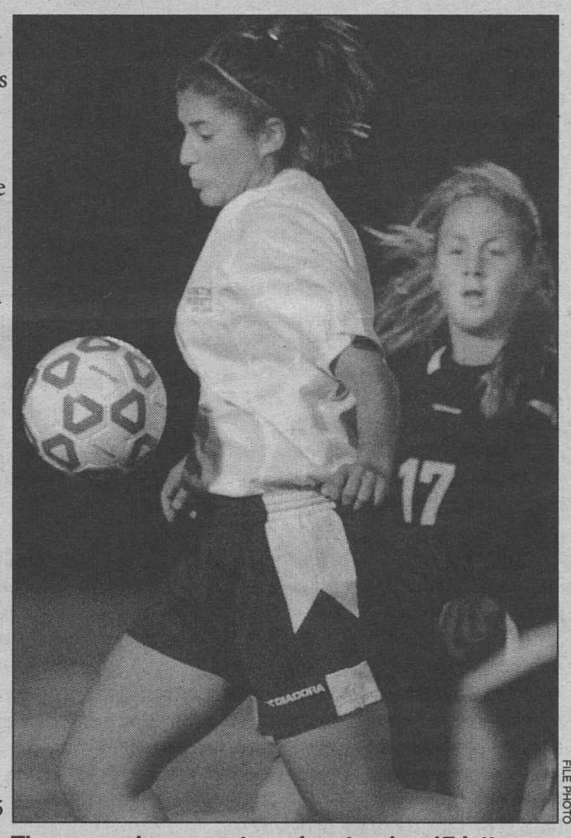
Winners of four straight UAA titles, Washington U. finished with 15 points (all first-place votes); Carnegie Mellon University (11 points) was picked to finish second, Case Western Reserve University (seven points) third, and the University of Chicago (three points) fourth.

The Bears finished 2004 with a 6-4 record en route to their fourth-straight UAA crown. WUSTL, which has won 15 straight conference games, won five of its last six games to secure its 12th straight winning season.

WUSTL's eight UAA titles came in 1994, 1995, 1996, 1999, 2001, 2002, 2003 and 2004.

Case Western Reserve took second place in the UAA last season with a 2-1 conference mark, while Carnegie Mellon (1-2) placed third and Chicago (0-3) fourth.

The Red and Green, which return three starters on offense and eight on defense, open 2005 on Sept. 3 at Mount Union College; UAA play commences Oct. 8 at Chicago.


FILE PHOTO

The women's soccer team is returning 17 letter-winners and eight starters from last year's squad. Among them are junior midfielder Talia Bucci, a 2004 first-team all-league selection who started all 21 games and recorded four goals and six assists.

Soccer seeks seventh conference crown

The men's soccer team will look for its seventh UAA title and 17th appearance in the NCAA tourney when it kicks off the 2005 season Sept. 3 against Millsaps College.

The Bears return 20 letter-winners and seven starters from a team that went 12-5-2 overall and 3-2-2 (T-3rd) in conference play last season.

Seniors David Borton, Seth Schreiber and Rob Weeks lead the way. Borton tallied three goals and two assists in 18 games in 2004, while Schreiber started 14 of the 19 games for the Red and Green. A 2004 first-team all-UAA and third-team all-Central Region honoree, Weeks netted a team-best eight goals and three assists for WUSTL. His career numbers include 16 goals and eight assists, including eight game-winning goals.

Washington U. begins 2005 with nine non-conference contests before facing UAA-rival Emory University in Atlanta on Oct. 1.

Core runners return after strong 2004

The men's and women's cross country teams enjoyed another fine season in 2004, and have their cores returning this year.

The women finished a program-best third at the NCAA Championships and won their third straight UAA title, marking another banner season for the Bears. They return four of their five top runners from 2004 in senior Steph Felz, juniors Lindsay Harkema and Beth Herndon, and sophomore Tyler Mulkin. All four earned all-Midwest Region accolades, helping the Red and Green to second place at Regionals.

Seniors Greg Reindl and Brennan Bonner lead the WUSTL men this fall. Both earned all-Midwest Region last year and helped the Bears to a second-place showing at the conference meet. Reindl also represented WUSTL's men at the NCAA Championships.

The Bears open 2005 Sept. 3 by hosting the WUSTL Early Bird Meet at Saint Louis Priory High School.

On the Web

For complete sports schedules and results, go to **bearsports.wustl.edu**.

University Events

Computing Facility Open House • Basic Science Seminar Series

"University Events" lists a portion of the activities taking place Aug. 26-Sept. 8 at Washington University. Visit the Web for expanded calendars for the Hilltop Campus (calendar.wustl.edu) and the School of Medicine (medschool.wustl.edu/calendars.html).

How to submit 'University Events'

Submit "University Events" items to Genevieve Podleski of the *Record* staff via:
(1) **e-mail** — recordcalendar@wustl.edu;
(2) **campus mail** — Campus Box 1070; or
(3) **fax** — 935-4259.
Deadline for submissions is noon on the Thursday eight days prior to the publication date.

Lectures

Friday, Aug. 26

9:15 a.m. Pediatric Grand Rounds. "The Three 'B's' of Insulin Treatment for Type I Diabetes: Basal, Bolus and Blood Sugar Monitoring." Abby S. Hollander, assoc. prof. of pediatrics. Clopton Aud., 4950 Children's Place. 454-6006.

Wednesday, Aug. 31

7:30-9:30 a.m. Center for the Application of Information Technology Seminar. "Leveraging IT to Drive Corporate Innovation." R. Keith Sawyer, assoc. prof. of education. St. Louis Science Center, Mission Control Rm. To register: 935-4444.

Thursday, Sept. 1

Noon. Center for Health Policy Brown Bag Seminar Series. "Emerging Public Health Policy Issues." Leslie Reed, vice pres. for health policy, Mo. Foundation for Health. Simon Hall, Rm. 241. 935-9108.

4:15 p.m. Earth & Planetary Sciences Colloquium. "Reconstruction of Archean and Paleoproterozoic Microbial Communities and Biogeochemical Cycles." Carrine Blank, asst. prof. of earth & planetary sciences. Earth & Planetary Sciences Bldg., Rm. 203. 935-5610.

Tuesday, Sept. 6

5:30 p.m. Biochemistry & Molecular Biophysics Biophysical Evenings Seminar Series. "Fundamental Designs and Rigorous Characterization for the Development of Synthetic Nanomaterials." Karen Wooley, prof. of chemistry. Cori Aud., 4565 McKinley Ave. 362-4152.

Thursday, Sept. 8

3 p.m. Siteman Cancer Center Basic Science Seminar Series. Greg Longmore, assoc. prof. of medicine. Eric P. Newman Education Center. 454-7029.

4 p.m. Chemistry Seminar. Joseph W. Kennedy Memorial Lecture. "Water, Triangles and Superconductivity in Sodium Cobalt Oxides." Robert J. Cava., chair & prof. of chemistry, Princeton U. (3:45 p.m. coffee; 5:30 p.m. reception & portrait unveiling.) Lab Sciences Bldg., Rm. 300. For reception, RSVP to 935-6593.

4 p.m. Ophthalmology & Visual Sciences Seminar. "cGMP, Calcium and Cell Death: Lessons From Retinal Degenerative Diseases." Visvanathan Ramamurthy, research asst. prof. of biochemistry, U. of Wa. Maternity Bldg., Rm. 725. 362-1006.

Sports

Saturday, Sept. 3

10 a.m. Volleyball vs. Rhodes College. Washington University Classic. Athletic Complex. 935-4705.

2:30 p.m. Volleyball vs. Ill. Wesleyan U. Washington University Classic. Athletic Complex. 935-4705.

Tuesday, Sept. 6

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

Wednesday, Sept. 7

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

And more...

Tuesday, Aug. 30

9 a.m.-4 p.m. North Campus Computing Facility Open House. Coffee & refreshments provided. Co-sponsored by the Bernard Becker Medical Library. North Campus, 700 Rosedale Ave. 362-4223.

Wednesday, Sept. 7

11 a.m.-1 p.m. Siteman Cancer Center Gynecologic Wellness Booth. North Bldg., outside cafeteria. 605-2916.

Employment

Go online to **hr.wustl.edu** (Hilltop Campus) or **medicine.wustl.edu/wumshr** (Medical Campus) to obtain complete job descriptions.

Hilltop Campus

For the most current listing of Hilltop Campus position openings and the Hilltop Campus application process, go online to hr.wustl.edu. For more information, call 935-5906 to reach the Human Resources Employment Office at West Campus.

Clinical Study Coord. 050048
Asst. Dir. for Disability Resources 050099
Software Developer 050104
Coord. Of Experimental Computing 050186
Curator 050226
Exec. Dir. Regional Development Progs. 050248
Islamic Studies Catalog/Subject Librarian 050260
Reference/Web Services Librarian 050261
Assoc. Dir. MBA Career Advising 050278
Lab Technician IV 050279
HVAC Technician II 050285
Dir. of MBA Admissions and Financial Aid 050288
Network Systems Engineer (Microsoft) 060006
Network Security Analyst 060008
User Services Supervisor 060009
Senior Dir. of Capital Projects 060012
Deputized Police Officer 060014
School Accountant—Business & Law 060017
Admissions Officer 060018
Administrative Asst. 060019
Student Financial Service Rep. 060020
Project Leader/IS 060021
Administrative Secretary 060022
Administrative/ Budget Asst. 060023
Assoc. Dir. of Alumni Relations 060024
Assoc. Dir. of Development, En. & App. Sci. 060025
Assoc. Dir. of Development, En. & App. Sci. 060027
Administrative Asst. 060028
Hazardous Materials Tech II 060029
CFU Accountant (Reporting) 060030
Administrative Asst. 060034
Clinical Specialist 060035
Compensation Analyst 060036
Programmer Analyst III 060037
Research Analyst 060039
Lab Technician I 060040
Communications Coordinator 060046

Medical Campus

This is a partial list of positions in the School of Medicine. Employees: Contact the medical school's Office of Human Resources at 362-7196. External candidates: Submit résumés to the Office of Human Resources, 4480 Clayton Ave., Campus Box 8002, St. Louis, MO 63110, or call 362-7196.

Research Technician II 051244
LPN 051310
RN Staff Nurse – Part Time 060028
Research Patient Asst. 060133
Grant Analyst 060139
Research Technician I 060140
Patient Billing/ Services Rep. I 060141
Animal Care Technician II 060142
Animal Care Technician I 060143
Animal Care Technician I 060144
Accounting/Purchasing Asst. I 060145
Staff Scientist 060146
Asst. to the Chair 060148
Lab Asst. I; Glasswasher I 060149
Patient Billing/Services Rep. I 060151
Staff Scientist 060152
Animal Care Technician II 060154
Community Development Specialist 060155
Custodian/Housekeeper 060156
Animal Care Technician I 060158
Medical Asst. II 060159
Medical Asst. II 060160
Accounting/ Purchasing Asst. I 060161
Medical Records Clerk 060163
Medical Asst. II 060164
Research Technician I 060171
Analyst, Quality Control/Training 060172
Medical Secretary II 060173

African & Afro-American Studies changes its name

BY NEIL SCHOENHERR

The African and Afro-American Studies Program in Arts & Sciences has changed its name and will now be referred to as the African and African American Studies Program in Arts & Sciences.

"One of the important programs of Arts & Sciences is entering a new phase of its life under the leadership of John Baugh (Ph.D., chair of the program and the Margaret Bush Wilson Professor in Arts & Sciences)," said James L. McLeod, dean of the College of Arts & Sciences. "The new name reflects this new phase while recognizing the continued commitment to questions taken up over the past 30-plus years."

The program offers students the opportunity to explore the social, political and intellectual history as well as the literature, culture and artistic life of various peoples who are African or of African descent.

Course work is balanced between the humanities and the social sciences. Principal areas of concentration are sub-Saharan Africa and the United States.

The program also features study-abroad opportunities in Kenya as well as other African countries.

Wristband

University to hold patent on invention

– from Page 1

Medical has been formed to develop and distribute the technology. Headed by Stephen Chole, the company conducted a successful trial of the technology at the Center for Advanced Medicine and will soon place monitors outside of all surgical suites in Barnes-Jewish Hospital.

"The system worked very well in our trial," Woods said. "We're eager to implement it throughout the hospital. We want to do everything we can to ensure patient safety."

CheckSite plans to distribute the technology nationwide and is performing pilot trials in other regional hospitals. According to Richard Chole, the technology will be inexpensive, costing around $2.50 for the wristband and pen and $7,000-8,000 for installation of the detectors.

The University will hold the patent on the invention.

"The University's Office of Technology Management was extremely helpful getting the technology off the ground," Richard Chole said.

"I went to them with my idea, and they handled the entire patent process."

Campus Watch

The following incidents were reported to University Police **Aug. 11-22**. Readers with information that could assist in investigating these incidents are urged to call 935-5555. This information is provided as a public service to promote safety awareness and is available on the University Police Web site at police.wustl.edu.

Aug. 17

9:34 p.m. — A person stated he left his secured bicycle outside the Cornerstone Café between 2-9:35 p.m. When he returned to the bike rack, he found his bicycle was missing.

Aug. 19

11:53 a.m. — A backhoe slipped out of gear and rolled into two vehicles on the parking lot in front of Simon Hall. There were no injuries and no one was in the backhoe when it struck the cars. Both vehicle owners were notified and one of the vehicles was towed.

Aug. 22

Following a report of a suspicious subject near Myers House, an officer recognized the subject because the subject was given a no-trespass warning last year. The subject was looking at bicycles in the bike racks. The subject was arrested for trespassing and booked at county intake.

University Police also responded to four auto accidents, two reports of property damage and one report each of judicial violation, lost article, fraud, parking violation and trespassing.

Record

Founded in 1905
Washington University community news

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Online Production Alice Marre

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(314) 935-6603
Campus Box 1070
kiley@wustl.edu

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

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

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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.

Washington University in St. Louis

Just Find it! Libraries unveil online search tool

On Aug. 22, University Libraries launched "Find it!" — an online search engine that allows users to search up to 10 of the libraries' databases at once.

Now, rather than going through the process of searching one database after another, researchers are able to quickly access information from a variety of sources. This powerful tool makes navigating the vast amount of information available electronically much faster and easier, making crucial research more manageable for both novice and experienced researchers.

With Find it!, users can search preselected groups of databases or create their own sets of online resources. This service will be especially attractive to novice researchers, for whom accessing online resources can be a confusing process.

More experienced researchers will appreciate the ability to create their own sets of often-searched databases.

Find it! also allows users to customize their research by saving search results in the same place they search. And because Find it! provides access to a variety of databases at once, it is also useful to scholars doing cross-disciplinary research.

Find it! allows users to easily access the full text of many articles. Find it! searches across databases, including University Libraries' catalog, to find the full-text version of an article; then the Get it! function of the search engine either links to the full text or tells users where they can locate it.

Users will find the link to Find it! at the top of the main menu on the Libraries' home page (*library.wustl.edu*). They will need to know their University ID in order to create an account and save information in the search engine.

For help while using Find it!, researchers can go to the "Help" link located on every page within the search engine.

A set of frequently asked questions will soon be available on the site, and librarians are available to answer questions.

Find it! will undergo changes and improvements over the next several months as the libraries receive feedback from users and as upgrades occur.

For more information, contact Carol Antoniewicz at 935-5498 or library.webmaster@wumail.wustl.edu.

Find it! training sessions

University Libraries will host Find it! training sessions from noon-1 p.m. Sept. 7, 14, 21 and 28 in the Arc Technology Center on Level A of Olin Library. These sessions are open to the University community.

Georgia

'In sum, it was a great learning experience'

– from Page 1

Sharashenidze, started the IIGD.

"NGOs play a particularly important role in the post-Soviet space, since after the breakdown of the Soviet government a sort of a vacuum arose in many places, and the government stopped functioning on many levels, particularly locally," Faust said.

"There are many NGOs in Georgia, and they are active in many different areas. Most of the students who participated in last summer's University program in Tbilisi did internships with NGOs, which is how the idea arose to found an NGO themselves."

Faust got involved in this summer's program as a result of last summer's trip, during which he assisted Wertsch in the administration of the program. After the success last summer and the establishment of IIGD, the idea of an English language camp for minorities in Georgia was formed.

"All in all, it was a pretty challenging endeavor," Faust said. "I had no clear idea about what 16 Azerbaijani teenagers from the Marneuli-region in Georgia would be like, and what it would be like to teach them English."

COURTESY PHOTO

Three members of the WUSTL community spent part of their summer teaching English to 16 teenage members of the Azerbaijani minority in the former Soviet Republic of Georgia. The three are junior Steve Lopatin (front row, far left, kneeling); senior Aaron Weisman (middle, with bandana); and Joachim Faust (back row, far left), lecturer in International and Area Studies in Arts & Sciences.

But as a result of his interaction with the students, Faust "learned a lot about the Georgian mind-set, and also about the Azerbaijani culture, to which I had had no previous exposure."

"And eventually," Faust said, "I learned a lot about myself as well, as is always the case when dealing with people from other cultures in such an intensive way.

"In sum, it was a great learning experience."

Faust added that there is a lot of energy and momentum concerning the future of IIGD. He said plans are under way for a possible language camp with the same group of teenagers this winter.

Next summer's program may include members of other minority groups in Georgia, including Ossetian, Chechen and Armenian teenagers.

STARS

– from Page 1

when conditions are unfavorable for cell growth.

"These findings have implications for how tumor cells grow," Ma said. "If we can determine the regulation of the cytoskeleton, we could possibly develop better drugs or develop an application for a current drug."

Ma was one of 54 academically talented high-school juniors and seniors who participated in the STARS program, which pairs students with research mentors from WUSTL, the University of Missouri-St. Louis and Saint Louis University.

Forty-eight students from area high schools in the St. Louis metropolitan area and six students from out of town participated in the program.

For six weeks, medical researchers, biologists, chemists, computer scientists, earth scientists, engineers and other scientists shared their expertise as they directed the students in research projects in their labs.

"This program is unique because students are introduced to hands-on opportunities to address real-world problems, exposing them to basic research, creativity and the struggles of discovery," said Ken Mares, director of the STARS program.

Besides conducting research and presenting papers, students attended lectures by leading scientists (including one about the physics of parachutes), toured scientific enterprises in St. Louis and took part in career workshops. They also cheered on the Cardinals during the last season in the current Busch Stadium.

"This experience has made me more interested in science and helped me realize that I want to go into clinical medicine," said Ma, who also plays violin in her school orchestra and is involved in a number of other organizations.

Her research paper was reviewed by Pfizer Inc. and was given the Pfizer Award for Excellence in Research.

Scheidenhelm said Ma took initiative and conducted her experiments very carefully.

"I think her attention to detail and work ethic will benefit her in a scientific career," Scheidenhelm said. "I think she can achieve anything she wants."

> **"This experience has made me more interested in science and helped me realize that I want to go into clinical medicine."**
>
> DIANE MA

Scheidenhelm especially enjoyed being a mentor in the STARS program because she participated in a similar program in high school.

"I liked being on the other side and mentoring a student," she said. "My experience in high school really helped me form my education and career goals."

Ma would like to attend an Ivy League school and hopes to become a family practitioner.

"This program has made me much more motivated," she said. "I also think I did something very worthwhile this summer."

Notables

Of note

Michael C. Ogilvie, Ph.D., professor of physics in Arts & Sciences, has received a three-year, $498,132 grant from the U.S. Department of Education for "Graduate Fellowships for Ph.D. Studies in Physics." …

Richard H. Rochberg, Ph.D., professor of mathematics in Arts & Sciences, has received a three-year, $141,396 grant from the National Science Foundation for research titled "Problems in Function Theory and Operator Theory." …

Pratim Biswas, Ph.D., director of the Environmental Engineering Program and the Stifel and Quinette Jens Professor of Engineering, has received a six-month, $63,750 grant from the University of Rochester for research titled "Relationship Between Physicochemical Characteristics and Toxicological of Nanoparticles." …

Patrick Crowley, Ph.D., assistant professor of computer science and engineering, has received a two-year, $150,000 grant from the National Science Foundation for research titled "Architectural Support for Effective User-Level Data Transport." …

Mark A. Franklin, Ph.D., the Hugo F. and Ina Champ Urbauer Professor of Computer Science and Engineering, has received a four-year, $1,150,000 grant from the National Science Foundation for research titled "ITR — ASE — (int dmc): Storage Based Supercomputing for Scientific Applications." …

Jonathan S. Turner, Ph.D., the Henry Edwin Sever Professor of Computer Science and Engineering, has received a one-year, $152,597 grant from the National Science Foundation for research titled "Collaborative Research: Virtual Networking — Enabling innovation in Networks and Services." …

Lihao Xu, Ph.D., assistant professor of computer science and engineering, has received a three-year, $300,000 grant from the National Science Foundation for research titled "Design and Implementation of Hydra: A Platform for Survivable and Secure Storage Systems." …

Ramesh K. Agarwal, Ph.D., director of the Aerospace Engineering Program and the William Palm Professor of Engineering, has received a one-year, $11,397 grant from the National Science Foundation for "International Research and Education Planning Visit: Supplement to NSF Grant #0431948 to Visit Baumann Moscow State University, Russia." …

Charles Hohenberg, Ph.D., professor of physics in Arts & Sciences, has received a five-year, $703,400 grant from NASA for research titled "Noble Gas Measurement and Interpretation of Returned Genesis Solar Wind Collector Material." …

Himadri B. Pakrasi, Ph.D., professor of biology in Arts & Sciences, has received a five-year, $4,930,005 grant from the National Science Foundation for research titled "FIBR: A Systems Approach to Study Redox Regulation of Functions of Photosynthetic Organisms." …

Rohit Pappu, Ph.D., assistant professor of biomedical engineering, has received a three-year, $425,732 grant from the National Science Foundation for research titled "Studying the Origin of Conformational Preferences in Unfolded Proteins." …

Charles E. Robin, executive director of Edison Theatre, has received a one-month, $3,600 grant from the Heartland Arts Fund for "Les Percussions de Guinee," and a one-month, $24,000 grant from the Heartland Arts Fund for "Bang On A Can All Stars With Glass and Riley." …

Ayanna K. Thomas, Ph.D., research associate in psychology in Arts & Sciences, has received a two-year, $125,460 grant from the National Institute on Aging for research titled "Metamemory Deficits in People with Alzheimer's Disease." …

Milorad Dudukovic, Ph.D., chair and the Laura and William Jens Professor of Chemical Engineering, has received a two-year, $111,651 grant from Southern Illinois University-Edwardsville for research titled "Development of a Predictive Model for DDGS." …

Cindy Grimm, Ph.D., assistant professor of computer science and engineering, has received a three-year, $233,999 grant from the National Science Foundation for research titled "Surface Construction and Comparison Using Manifolds." …

Craig Pikaard, Ph.D., professor of biology in Arts & Sciences, has received a one-year, $282,579 grant from the University of Missouri for research titled "Functional Genomics of Maize Chromatin." …

Robert Pless, Ph.D., assistant professor of computer science and engineering, has received a three-year, $300,000 grant from the National Science Foundation for research titled "Non-Parametric Representations of Motions and Actions in Video." …

Karen L. Wooley, Ph.D., professor of chemistry in Arts & Sciences, has received a three-year, $419,736 grant from the Office of Naval Research for research titled "The Development of Non-toxic Anti-fouling Coatings Based Upon Nanoscopic." …

Joseph J.H. Ackerman, Ph.D., chair and the William Greenleaf Eliot Professor of Chemistry in Arts & Sciences, has received a three-year, $116,279 grant from the National Science Foundation for research titled "CRIF: Purchase of a Resource for Computational Chemistry." …

Vladimir B. Birman, Ph.D., assistant professor of chemistry in Arts & Sciences, has received a four-year, $918,000 grant from the National Institute of General Medical Sciences for research titled "Study of a New Class of Chiral Nucleophilic Catalysts." …

Sarah C. Elgin, Ph.D., professor of biology in Arts & Sciences, has received a four-year, $1,254,600 grant from the National Institute of General Medical Sciences for research titled "RNAi-directed Assembly of Heterochromatin in *Drosophila*." …

Gayle J. Fritz, Ph.D., professor of anthropology in Arts & Sciences, has received a two-year, $11,971 grant from the National Science Foundation for "Doctoral Dissertation Research: The Ocampo Caves in Context: Agricultural Development in Southwestern Tamaulipas, Mexico." …

Petra Levin, Ph.D., assistant professor of biology in Arts & Sciences, has received a five-year, $700,000 grant from the National Science Foundation for research titled "CAREER: Identification and Characterization of Factors Promoting Cytokinetic Ring Formation in Bacillus Subtilis."

Alumni & development's Stoll, Henson & Schwartz promoted

BY BARBARA REA

William S. Stoll has been named associate vice chancellor for development, and Pamella A. Henson and Jonathan F. Schwartz have been promoted to assistant vice chancellors.

The promotions were announced by David T. Blasingame, executive vice chancellor for alumni and development programs.

Stoll will lead the major gifts and capital projects team. He succeeds James D. Thompson, who has accepted a position as senior vice president and chief advancement officer at the University of Rochester.

"Bill has been an integral part of the development of our major gifts team and has earned this promotion with his ability to make friends for the University and with his outstanding contributions to the progress of our major gifts and regional initiatives," Blasingame said.

Stoll joined WUSTL's alumni and development team in 1993 as regional director of development. Four years later, he was named director of regional development programs, then senior director of regional development programs.

Most recently he served as executive director of regional development programs and as assistant vice chancellor.

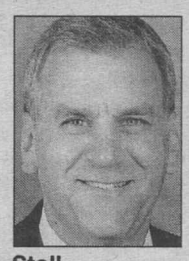
He came to St. Louis after working in Washington, D.C., first at American University and then at the National Academy of Sciences. He began his career at Ursinus College, where he earned a bachelor's degree in political science.

Stoll also holds a master's degree in liberal arts from Washington University.

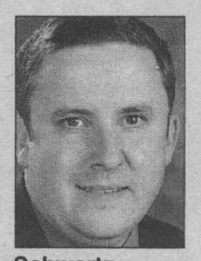
Henson has been promoted to assistant vice chancellor for alumni and development programs. She will supervise such programs for the Hilltop Campus schools and report to Blasingame in that capacity.

In addition, Henson will serve as chief deputy to Richard J. Luze, interim associate vice chancellor and director of the national councils. In this role, she will assist with annual giving, alumni relations, parent programs, alumni and parents admission programs, international alumni and development programs and the Richard A. Gephardt Institute for Public Service.

"Pam has done an excellent job for Washington University during her tenure, and we are fortunate to have someone with her experience and accomplishments to step into these responsibilities," Blasingame said.


Stoll


Henson


Schwartz

Before graduating from the University of Michigan with a bachelor's degree in communications, Henson began her development career at the Lawrence Institute of Technology in Southfield, Mich. She then worked for the United Way of the Desert in Palm Springs, Calif., and also for the University of Redlands.

Henson joined the Washington University staff in 1993 as regional director of development and associate director of major gifts. Three years later, she was named director of capital projects.

When the Alvin J. Siteman Cancer Center opened in 2000, she was appointed its executive director of development.

She will continue to lead Siteman's development activities until a successor is named.

Schwartz also has been promoted to assistant vice chancellor. He will serve as Stoll's chief deputy in the major gifts and capital projects department.

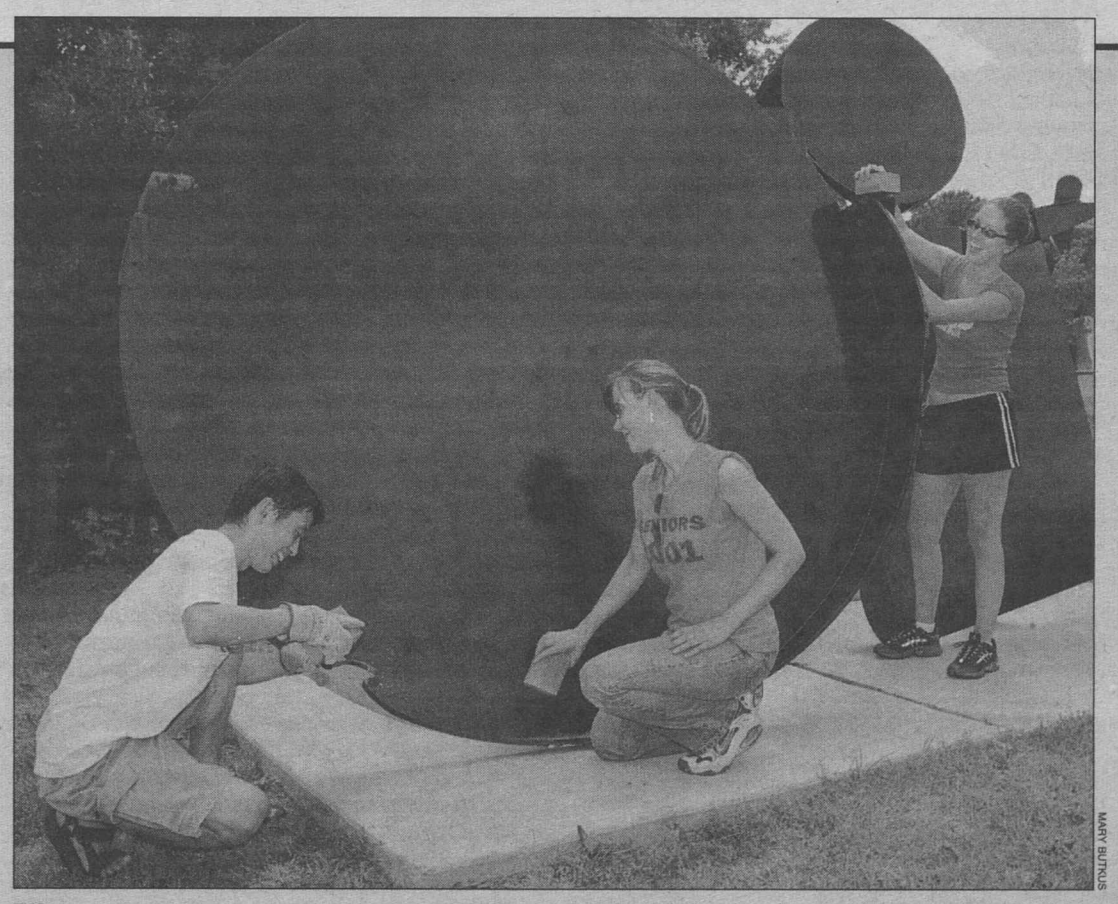
"Jonathan has done an outstanding job since he joined Washington University and has played a key role in the success of our department," Blasingame said. "His excellent strategic thinking and organizational skills have been great assets."

Schwartz has been with the University since 2001, when he joined alumni and development programs as director of capital projects.

Earlier this year, he was appointed senior director of capital projects.

He entered the higher-education development profession in 1992, spending nine years in a variety of positions at the California Institute of Technology. Prior to that, Schwartz was a teaching assistant in cinema studies at the University of Southern California.

He holds a bachelor's degree in history from Georgetown University and a master's degree from Northwestern University, and he has conducted doctoral work in cinema at USC.


MARY BUTKUS

Elbow grease First-year law students (from left) Akira Irie, Alana Hake and Samantha Folkemer remove rust from a sculpture at the Laumeier Sculpture Park in St. Louis as part of a public-service project during the School of Law's orientation. One hundred and seventy-five law students participated in a variety of service projects at seven sites throughout St. Louis Aug. 19.

Volunteers sought for first days of class

The Office of Student Activities and Student Union are looking for volunteers to help new students find their way to classes on the mornings of Aug. 31 and Sept. 1.

For more information, e-mail Pamela Bookbinder at vp@su.wustl.edu.

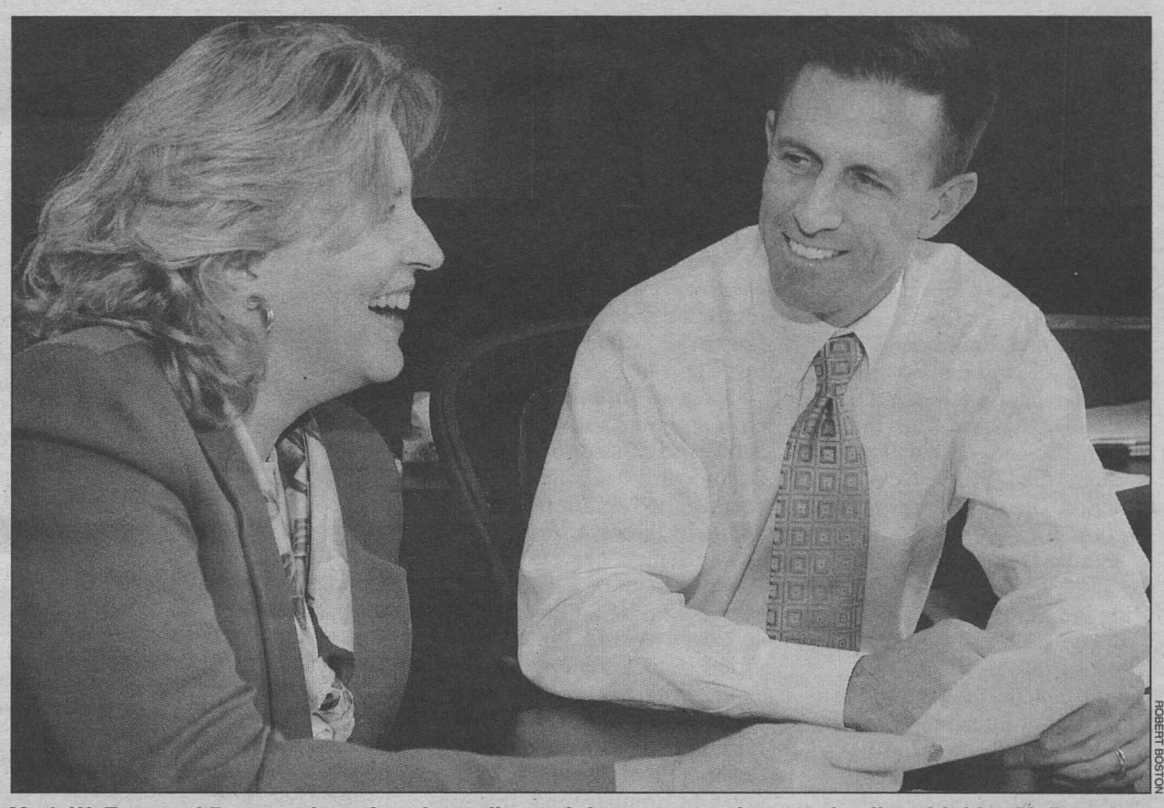
Obituary: Joseph

Harold J. Joseph, M.D., attending physician on the University teaching service at St. Louis City Hospital from 1955-1960, died Thursday, Aug. 18, 2005, of cerebral hemorrhage at Missouri Baptist Medical Center. He was 78.

Obituary: Van den Burg

Herbert Van den Burg, former principal violist with the Saint Louis Symphony Orchestra and a lecturer in the Department of Music in Arts & Sciences from 1953-1970, died Sunday, Aug. 14, 2005, at Bethesda Barclay House in Clayton. He was 100.

Washington People



ROBERT BOSTON

Mark W. Eggert, J.D., associate vice chancellor and deputy general counsel, talks with Lisa M. Braun, J.D., associate general counsel, in his office in the East Building on the Medical Campus. Says Michael Cannon, J.D., executive vice chancellor and general counsel, "What really sets (Mark) apart is how he weaves his legal brilliance and experience around a core of great wisdom, extraordinary strategic skills, high integrity, even temperament and an active sense of humor."

Focused on the family

Mark W. Eggert makes sure he keeps his priorities in order

BY ANDY CLENDENNEN

Walking into Mark W. Eggert's office, it's immediately apparent what's important to him.

Pictures of his wife and four children adorn his desk … his walls … his bookcases. Sculptures clearly crafted by talented young hands add a bit of color to the room at the end of the hall in the East Building at the School of Medicine.

And photographs from his military experience have their own place on the wall.

Two things have had a profound effect on Eggert, J.D., associate vice chancellor and deputy general counsel: his family and his military experience.

Following his graduation from Harvard Law School in 1986 (he also earned an undergraduate degree from Harvard), Eggert was like many young attorneys — ready to do whatever it took to become a better lawyer, make his mark and move up the ranks.

Instilled at a young age with solid family values by his parents, Eggert joined the U.S. Army National Guard in 1982. Over the next 12 years, he attained the rank of captain and added a litany of awards and achievements to his résumé.

He also saw his outlook on life start to change.

"The Army's Ranger and Pathfinder schools teach soldiers to perform special missions in small groups," Eggert explains. "It was really rigorous training and taught me a lot about how people react under high strain, when they are tired, hungry, physically exhausted.

"It makes you realize how important it is, in almost anything you do, to be supported by other people and to be able to count on those people in tough times. My military experience is something that I'm proud of, and I feel it's had a big impact on how I do my job now — how I approach my work and my family life."

His first job as an attorney came in the office of Republican Missouri Sen. John Danforth in Washington, D.C., in 1987. But just two years later, Eggert and his wife, Julie, also a recent law school graduate, moved to San Francisco so she could take a job with a firm.

And that's where Eggert experienced a life-changing event. His son, Brian, was born in 1990.

"Before children, my focus was on career development — becoming a better lawyer, and how I might use my legal experience to pursue a career in government or politics," Eggert says. "But after Brian was born, almost immediately my focus started shifting to how I could be the best parent, and how I could turn out the best children possible."

Feeling the need to be closer to the new grandparents, Eggert — who grew up on a farm in Franklin County, Mo., and attended Union High School — and Julie moved back to Missouri.

Three children followed in the next few years: twins Natalie and Lauren and youngest son Kevin.

Upon his return to Missouri, Eggert served a stint in the U.S. Attorney's Office in St. Louis, where he was an Assistant U.S. Attorney in the economic crimes unit of the criminal division.

"At that point in my career, I really wanted the job in the U.S. Attorney's office. It is an important public service position," Eggert says. "The job gave me a lot of personal satisfaction, and it's an excellent position for litigation attorneys because you spend a lot of time in the courtroom."

But family remained at the forefront of his decision-making. Eggert's three youngest children were born while he was serving in the U.S. Attorney's Office.

With four children, he began worrying about how he would finance their college educations and all the other expenses that he knew would be coming. He decided a move back to private practice was in order, which led Eggert to Bryan Cave LLP, Missouri's largest law firm.

There, Eggert's practice areas included client counseling on regulatory matters and contractual disputes, corporate criminal defense and internal investigations, and complex commercial litigation.

And one of his clients just happened to be Washington University.

"When I started doing work for Washington University, I became very interested in the in-house practice at a university," Eggert says. "It's not something I knew anything about until I started working as an outside lawyer for the University.

"But the more I learned about it, the more I realized that universities face probably the broadest range of legal issues of any institution in our country. So for a lawyer, an in-house position at a university is incredibly challenging.

"There is always something new. There is no way to get stale in one of these positions."

It is said that timing is everything, and Eggert's predecessor was leaving the University's general counsel office at about the same time that Eggert was realizing that being in private practice — with its all-consuming nature — might not be the best way to spend his time. Certainly not with four kids running around at home.

So, in 1998, he applied for — and was offered — the position he currently holds.

Eggert primarily oversees the legal affairs of the School of Medicine, though he also works on legal matters involving other elements of WUSTL.

"Mark has brought so much more to the University than his remarkable legal talents and wide-ranging experience," says Michael Cannon, J.D., executive vice chancellor and general counsel. "What really sets him apart is how he weaves his legal brilliance and experience around a core of great wisdom, extraordinary strategic skills, high integrity, even temperament and an active sense of humor.

"Mark is a wonderful communicator and a tremendous asset to the University."

Eggert says that because universities are always pushing the boundaries of science and human knowledge, they also push the boundaries of the rules and regulations that govern these endeavors.

The government is constantly updating the rules to account for new discoveries in science or medicine. That's a big factor for the general counsel's office, to stay on top of the changing regulatory landscape so that it can help guide the University's physicians and researchers through it.

"This position has given me everything I've wanted," Eggert says. "I work with fantastic people — the faculty members and the administrators are very smart, innovative people, all involved in incredible research or clinical care.

"Even though I don't actually perform any of the terrific work that they do for their patients, or for the advancement of science, I feel good about being able to support them in their efforts. I get a lot of satisfaction from it."

"Mark Eggert is an enormous asset to Washington University," says Larry J. Shapiro, M.D., executive vice chancellor for medical affairs and dean of the School of Medicine. "He brings great knowledge, expertise and good judgment to the table. He is strongly devoted to the mission of the School of Medicine and has a remarkable ability to multitask.

"He is a formidable adversary, probably drawing on his Army Ranger days, but is also a wonderfully supportive colleague and friend," Shapiro continues before adding tongue-in-cheek, "which is a hard thing for a physician to say about a lawyer."

Working at the University has also given Eggert more time to spend with his family. And he makes the most of that time.

He has coached all of his children in baseball and softball, and still coaches Kevin's Little League team.

He and Julie also try to take at least one family vacation per year where the kids will do something exciting or learn something new.

In early August, they traveled to Greece and the Netherlands.

"Since our entire focus is on the kids, these family vacations are really important," Eggert says.

"Sometimes we are exploring, like this year, and sometimes we just do lake vacations, boating, fishing, reading on the dock and just relaxing as a family."

When he can fit it in, he plays baseball for a senior league team. He's been doing that for the past eight years, and uses the game as a way to clear his mind: "When I'm playing ball, I'm not thinking about anything else," he says with a smile. "I enjoy the competition and the camaraderie."

John Jellison, a 509th Airborne veteran and teammate of Eggert's on the baseball team, says, "In the short years that I have known Mark, he is the best friend a man can have. Growing up in the military, and serving myself, it was easy to befriend Mark.

"With Mark, what you see is what you get. He will always go the extra mile, help or offer to whether called upon or not."

Eggert's athletic endeavors aren't the only thing on his agenda, though — despite being busy, he tries to make it to all of his kids' extracurricular activities.

Now 14 years into the parenting experience, Eggert says that being parents has been "surprisingly rewarding, because the kids force us to see the world through their eyes, and that keeps us fresh, keeps us excited about things that might not be new to us anymore."

"Julie and I feel that we are in a 20-year period where our entire focus, our single priority, is turning our kids into good, compassionate, productive young people before we send them on their way," he says. "So this is all part of it, the little things like making sure I'm at their sporting events or dance recitals, and doing things together as a family.

"Sometime when they are in their 30s, I'd like them to think back and say, 'Gee, my parents were there when I pitched a great game, or performed in a big dance competition, or sang in the school concert.' I really want them to have that recollection and hopefully have the same emphasis with their kids."

Mark W. Eggert

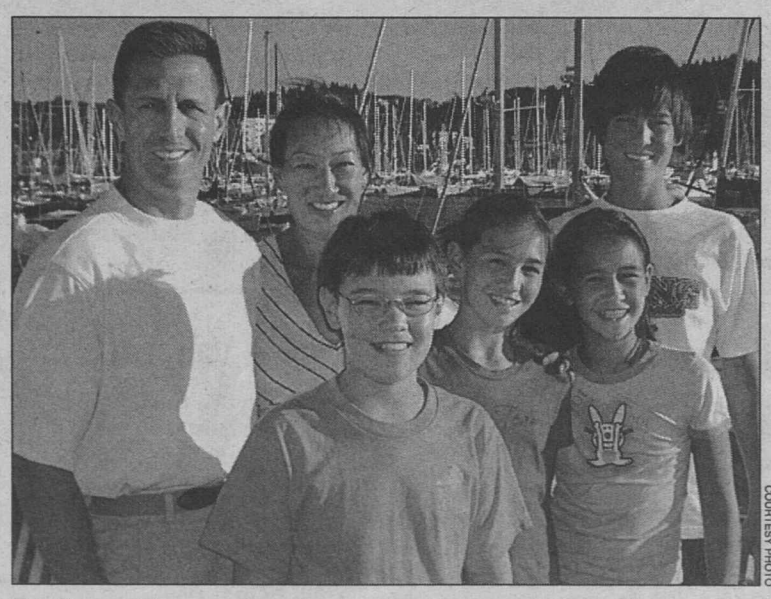
University title: Associate vice chancellor and deputy general counsel

Military honors: Captain, Infantry; Airborne, Ranger and Pathfinder qualified; Expert Infantryman's Badge; Army Commendation Medal; Army Service Ribbon; Distinguished Leadership Graduate (first in class of 200), Infantry Officer's Basic Course; honorable discharge.

On his undergraduate degree at Harvard: "It was in an odd concentration called social studies, which sounds like fourth-grade geography, but it was a department that tried to mix the best elements of the social sciences.

"We were required to have a grounding in economics, political science, social theory and philosophy. It was a social science major, but very interesting and a heavy emphasis on social theory.

"They pushed us hard in this department. It was a great education."



COURTESY PHOTO

Family vacations are important to Eggert; he and his family recently returned from a trip to Greece and the Netherlands. In the harbor of Corfu are (from left) Mark, Julie, Kevin, Lauren, Natalie and Brian.