Tumor weaknesses can be exploited

BY GWEN ERICSON

Tumors have a unique vulnerability that can be exploited to make them more susceptible to heat and radiation. School of Medicine researchers reported that WUSTL radiation oncology researchers found that tumor cells have a built-in mechanism that prevents them from heat (hyperthermia) damage and most likely decreases the benefit of hyperthermia and radiation as a combined therapy. By interfering with this protection, the researchers have shown that tumor cells grown in culture can be made more sensitive to heat and radiation. The findings were reported in the May 1 issue of Cancer Research.

Radiation therapy is a mainstay of cancer care but doesn't always completely control tumors. For several years, raising tumor temperature has been investigated as a radiation therapy enhancer with few adverse side effects.

"Past research has shown that hyperthermia is one of the most potent ways to increase cell-killing by radiation," said research report author Raj K. Pandita, MD, associate professor of radiation oncology in genetics and a St. Louis Cancer Center researcher.

"But now we've found that heat also enhances the activity of an enzyme called telomerase in cancer cells," he said. "Telomerase helps protect the cells from stress-induced damage and allows some of them to survive. We used compounds that inhibit telomerase and showed that cancer cells then become easier to destroy with hyperthermia and radiation used in combination."

Telomerase repairs the ends of chromosomes by maintaining the stability of specialized cellular structures called telomeres after cells divide. Without telomerase, the number of cell divisions is limited. Telomerase is not active in most normal human cells but is active in most cancer cells, which rely on telomerase to continue to proliferate.

Pandita's research group found that moderately warming up the heat also turns up the activity of telomerase in tumor cells. The researchers found that if they inhibited telomerase and then increased the temperature of tumor cells, more cells were killed by ionizing radiation. Because nearly all cancers have telomerase, drugs that turn off its activity could be useful against many cancers.

The researchers tested three compounds, and found, GRN163L, more strongly inhibited telomerase than the others. Many groups are studying GRN163L as an anticancer therapeutic, and it recently received clearance by the U.S. Food and Drug Administration to enter human phase I/II clinical testing in chronic tumors.

Leax named dean of College and Graduate School of Art

BY LISA OTTEN

Donald Leax, the Haley and Rodney Lee Professor of Art, has been named dean of art, according to Carman Colangelo, dean of the Sam Fox School of Design & Visual Arts, and the E. Desmond Lee Professor for Collaboration in the Arts. Leax will lead the College of Art and the Graduate School of Art. The one-year appointment begins July 1. Leax will succeed Jeff Pike, the interim dean.

Reuter Hitzeman and Herbert F. Hittzimmer, Jr., Professor of Art, Pike has served as dean of art since 1999. He will return to full-time teaching following a sabbatical year.

"Jeff Pike has helped shepherd the College and Graduate School of Art through a period of great transformation," Colangelo said. "He was instrumental in launching the Sam Fox School, which combined existing programs in art and architecture, and in planning and developing our wonderful new facilities by Faulkner Macy.

"I am extraordinarily grateful for both his stewardship and his friendship," he said.

During his tenure, Pike developed a range of internships. See Leax, Page 4

Washington University in St. Louis

MRS SANDRA JEAN JOHNFMAN
CAMPUS BOX 6132

May 15, 2008

record.wustl.edu
Sports

Men's tennis qualifies three for NCAA

Junior Charlie Curter and Chris Hoeland both earned qualifications to WUSTL will represent WUSTL in the NCAA Division III Men's Tennis Individual Championships, held this weekend, May 16-18, at the Wallach Tennis Center in Lebanon, Maine.

Curter and Hoeland are two of 138 student-athletes who will compete in the singles draw, while Curter and Hoeland are one of 32 teams who will compete in the doubles draw. The Edison tennis season ends Oct. 3, 4 and 5 with new two productions by A.H. Shepley University Professor. As a corporate and regulatory lawyer, he worked on a variety of transactions including leveraged buyouts, mergers and acquisitions, private equity and other financings, and regulatory matters in the electric industry. Paredes earned a bachelor's degree in mathematics from the University of California, Berkeley, and a law degree from Yale University.

Paredes appointed to SEC

In January, Edison Theatre will bring its groundbreaking contemporary ballet to the Edison stage Oct. 10 and 11. Next year, Feb. 27 and 28 find the Trey McIntyre Project back on the Edison stage. The Trey McIntyre Project will perform "The Spy's" a riveting adventure set during the American Revolution, adapted by Jeffrey Hatcher from the novel by John de Lancie and Nat Segaloff. The Edison Theatre's 2008-09 season kicks off August 15-18, at the Wallach Tennis Center in Lebanon, Maine.

In January, Edison Theatre will present "Sweet Honey in the Rock," a blues, African chants and ancient cal traditions, capturing the meaning and experience of home, origin and family. The Season, the Edison's 36th, will feature more than a dozen dance, music and visual art performances. The Season, the Edison's 36th, will feature more than a dozen dance, music and visual art performances, capturing the meaning and experience of home, origin and family. More than a dozen dance, music and visual art performances, capturing the meaning and experience of home, origin and family. More than a dozen dance, music and visual art performances, capturing the meaning and experience of home, origin and family. More than a dozen dance, music and visual art performances, capturing the meaning and experience of home, origin and family. More than a dozen dance, music and visual art performances, capturing the meaning and experience of home, origin and family. More than a dozen dance, music and visual art performances, capturing the meaning and experience of home, origin and family.

The Edison Theatre OVATIONS! Series will sponsor a pair of special events. From Jan. 9-12, Edison Theatre will host "Troy Paredes," the professor of securities law, was named President George W. Bush May 6 to serve as one of five commissioners of the Securities and Exchange Commission (SEC). Paredes will take the seat being vacated by Paul Atkins, Paredes' term will begin June 6, pending confirmation by the Senate, and will end June 5, 2013.

"Troy Paredes is an extraordinary lawyer, teacher and scholar who cares about well-functioning securities markets," said Kent Severud, J.D., dean and the Ethan A.H. Shepley University Professor. "He will make an excellent SEC commissioner." Paredes' expertise focuses on issues related to securities regulation and corporate governance.

Troy Paredes, J.D., professor of securities law, was named President George W. Bush May 6 to serve as one of five commissioners of the Securities and Exchange Commission (SEC). Paredes will take the seat being vacated by Paul Atkins, Paredes' term will begin June 6, pending confirmation by the Senate, and will end June 5, 2013.

"Troy Paredes is an extraordinary lawyer, teacher and scholar who cares about well-functioning securities markets," said Kent Severud, J.D., dean and the Ethan A.H. Shepley University Professor. "He will make an excellent SEC commissioner." Paredes' expertise focuses on issues related to securities regulation and corporate governance.

Troy Paredes, J.D., professor of securities law, was named President George W. Bush May 6 to serve as one of five commissioners of the Securities and Exchange Commission (SEC). Paredes will take the seat being vacated by Paul Atkins, Paredes' term will begin June 6, pending confirmation by the Senate, and will end June 5, 2013.

"Troy Paredes is an extraordinary lawyer, teacher and scholar who cares about well-functioning securities markets," said Kent Severud, J.D., dean and the Ethan A.H. Shepley University Professor. "He will make an excellent SEC commissioner." Paredes' expertise focuses on issues related to securities regulation and corporate governance.

Troy Paredes, J.D., professor of securities law, was named President George W. Bush May 6 to serve as one of five commissioners of the Securities and Exchange Commission (SEC). Paredes will take the seat being vacated by Paul Atkins, Paredes' term will begin June 6, pending confirmation by the Senate, and will end June 5, 2013.

"Troy Paredes is an extraordinary lawyer, teacher and scholar who cares about well-functioning securities markets," said Kent Severud, J.D., dean and the Ethan A.H. Shepley University Professor. "He will make an excellent SEC commissioner." Paredes' expertise focuses on issues related to securities regulation and corporate governance.

Troy Paredes, J.D., professor of securities law, was named President George W. Bush May 6 to serve as one of five commissioners of the Securities and Exchange Commission (SEC). Paredes will take the seat being vacated by Paul Atkins, Paredes' term will begin June 6, pending confirmation by the Senate, and will end June 5, 2013.

"Troy Paredes is an extraordinary lawyer, teacher and scholar who cares about well-functioning securities markets," said Kent Severud, J.D., dean and the Ethan A.H. Shepley University Professor. "He will make an excellent SEC commissioner." Paredes' expertise focuses on issues related to securities regulation and corporate governance.

Troy Paredes, J.D., professor of securities law, was named President George W. Bush May 6 to serve as one of five commissioners of the Securities and Exchange Commission (SEC). Paredes will take the seat being vacated by Paul Atkins, Paredes' term will begin June 6, pending confirmation by the Senate, and will end June 5, 2013.

"Troy Paredes is an extraordinary lawyer, teacher and scholar who cares about well-functioning securities markets," said Kent Severud, J.D., dean and the Ethan A.H. Shepley University Professor. "He will make an excellent SEC commissioner." Paredes' expertise focuses on issues related to securities regulation and corporate governance.

Troy Paredes, J.D., professor of securities law, was named President George W. Bush May 6 to serve as one of five commissioners of the Securities and Exchange Commission (SEC). Paredes will take the seat being vacated by Paul Atkins, Paredes' term will begin June 6, pending confirmation by the Senate, and will end June 5, 2013.

"Troy Paredes is an extraordinary lawyer, teacher and scholar who cares about well-functioning securities markets," said Kent Severud, J.D., dean and the Ethan A.H. Shepley University Professor. "He will make an excellent SEC commissioner." Paredes' expertise focuses on issues related to securities regulation and corporate governance.
Substantial increases in alcohol dependence found in women

By Jim Dreyer

New research from School of Medicine investigators is calling into question some assumptions about drinking and alcohol dependence. Previous epidemiologic studies have found that rates of alcohol use and dependence are higher in younger people than older. Most also found that men tend to have more alcohol problems than women.

"There has been a great deal of social, economic and political progress for women in the years since World War II," said Richard A. Grucza, Ph.D., research assistant professor and first author of a study published this month in the journal Alcoholism: Clinical & Experimental Research. "It seems there also may be a downside to some of the advances, in terms of the risk for drinking and alcohol dependence among women."

Grucza and his colleagues noted that in most studies of alcohol use and dependence, younger people reported higher lifetime rates of alcohol problems than older people. Because older people have lived longer and had more time to develop problems, it would seem the reverse should be true. But after study after study showed more problems in younger people.

So Grucza’s team looked at data from two studies of alcohol use gathered 10 years apart. They studied data from the National Longitudinal Alcohol Epidemiology Survey, gathered 1991-1992, and data from the National Epidemiologic Survey on Alcohol and Related Conditions, which was gathered 10 years later, in 2001-2002. During that same time, they noted the percentage of participants affected by alcohol had also increased. They noted that among men, younger people had a higher rate of alcohol problems than older people. But for women, the percentage of women who reported alcohol problems had increased among all age groups, including young adult women.

Regarding the other observation that most studies find that younger drinkers are more likely to report alcohol problems than their older counterparts, Grucza said that trend remains. But by controlling for some variables between the studies conducted 10 years apart, he said two things are clear: First, both men and women now appear to be drinking more heavily at earlier ages. And he said that appears in epidemiologic studies, younger people are more likely to begin drinking alcohol at a younger age, while older people tend to wait longer.

Oxygen’s impact on infection after Caesarean section studied

By Diane Duke Williams

Researchers in the Department of Obstetrics and Gynecology are using an old question in a new population: Can giving extra oxygen to a patient undergoing a Caesarean section (C-section) decrease the risk of serious postoperative infections? In past studies, colorectal surgery patients given supplementary oxygen had fewer infections after surgery. The researchers hypothesized that supplying oxygen at the time of an incision in the skin (the incision site) might prevent infection and protect surgical wounds from having similar reactions.

In November 2007, there were similar reactions in two patients in the dialysis center who had just been connected to the dialysis machines. At that time, the staff thought the reaction was due to a chemical called ethylene oxide used to sterilize the dialysis equipment and a common cause of allergic reactions in dialysis patients. The staff changed chemicals used to sterilize the equipment, the machines and their tubing to eliminate any traces of ethylene oxide. So when two patients had similar reactions, Edward thought that it was some kind of chemical causing the reaction, with ethylene oxide still at the top of the list. A team of about 50 people convened and worked late into the night discussing possible medications and treatments, as well as using data from water sources and reviewing policies and procedures. In a literature search of similar incidents at other dialysis centers, Edward found that one possible cause was heparin, a drug used to prevent blood clotting and a common cause of allergic reactions in dialysis patients.

Edward was studied for about 10 days at the hospital, during which he participated in the study and provided detailed information about his allergic reactions. Of the participants reported to the CDC, three-fourths of them had been exposed to heparin. Since then, Baxter has recalled its heparin products in the United States and in several other countries.

By the following month, FDA representatives were on site taking heparin samples. Edward also worked with Baxter International Inc., which manufactured the heparin. The dialysis clinic staff did a wholesale change of water sources and medications — including using heparin from a different manufacturer — and relocated the clinic within the hospital.

The CDC posted warnings on a national listserve of dialysis units and soon received dozens of phone calls and e-mails from other centers nationwide reporting patients with similar reactions. Of all the patients reported to the CDC, three-fourths of them had been exposed to heparin. Since then, Baxter has recalled its heparin products in the United States and in several other countries.

Dr. Edward’s swift launch into a cause for which she had trained at Children’s Hospital was exemplary," said Alan L. Schwartz, Ph.D., M.D., the Harrist B. Spadaccini Professor and chairman of the Department of Pediatrics. "Her attention to detail will enable her to enter the many avenues in their investigations and likely protected other children receiving dialysis from having similar reactions."

"Through tedious investigations, Alexis Edward was able to uncover a situation that has profound ramifications, raising questions about international production of pharmaceutical products and the role of the U.S. Food and Drug Administration," said Dr. George S. Alcorn, M.D., the Ruth L. Stenberg Professor of Pediatrics and chief of the Division of Infectious Diseases. "The success of the investigation was no accident; it reflected Dr. Edward’s extreme commitment to patient safety and the skill and strength of the infection-control team at SLUH and the BJC Infection Control Consortium."

Although the investigation into the cause of the reactions is still ongoing, state and federal authorities, in March, the FDA found traces of over-sulfated chondroitin sulfate in some heparin from Baxter International. However, it is still investigating whether the contamination is cause for the adverse events.

Temporary pedestrian bridge installed on Euclid near depot

A temporary pedestrian bridge has been installed on the east side of Euclid Avenue near the Main Street/MetroLink stop. The accessible bridge will be in place for about four months to accommodate the increase of a tunnel under Euclid leading to the future loading docks of the BIC Institute of Health at Washington University.

School of Medicine Update

Quick thinking by Edward leads to international investigation

By Beth Miller

In early January, two patients undergoing kidney dialysis at St. Louis Children’s Hospital had suffered a life-threatening allergic reaction after the machines they were using were treated with ethylene oxide still at the top of the list. A team of about 50 people convened and worked late into the night discussing possible medications and treatments, as well as using data from water sources and reviewing policies and procedures. In a literature search of similar incidents at other dialysis centers, Edward found that one possible cause was heparin, a drug used to prevent blood clotting and a common cause of allergic reactions in dialysis patients.

Edward was studied for about 10 days at the hospital, during which he participated in the study and provided detailed information about his allergic reactions. Of the participants reported to the CDC, three-fourths of them had been exposed to heparin. Since then, Baxter has recalled its heparin products in the United States and in several other countries.

Dr. Edward’s swift launch into a cause for which she had trained at Children’s Hospital was exemplary," said Alan L. Schwartz, Ph.D., M.D., the Harrist B. Spadaccini Professor and chairman of the Department of Pediatrics. "Her attention to detail will enable her to enter the many avenues in their investigations and likely protected other children receiving dialysis from having similar reactions."

"Through tedious investigations, Alexis Edward was able to uncover a situation that has profound ramifications, raising questions about international production of pharmaceutical products and the role of the U.S. Food and Drug Administration," said Dr. George S. Alcorn, M.D., the Ruth L. Stenberg Professor of Pediatrics and chief of the Division of Infectious Diseases. "The success of the investigation was no accident; it reflected Dr. Edward’s extreme commitment to patient safety and the skill and strength of the infection-control team at SLUH and the BJC Infection Control Consortium."

Although the investigation into the cause of the reactions is still ongoing, state and federal authorities, in March, the FDA found traces of over-sulfated chondroitin sulfate in some heparin from Baxter International. However, it is still investigating whether the contamination is cause for the adverse events.
Rendezvous in Space • Microsurgery
• The Human Cerebral Cortex

University Events

Submissions

The next deadline will be June 12. Deadline for University Events submissions is noon June 9.

Newman Education Center. To register: 687-3867.

Tuesday, May 20
Neon: Microvascular & Microsurgical
Pathogenesis Seminar Series: "Improving
Interactions Approaching the Host." Maria
Moll berry, u. of medicine, portugal.
McThe Medical School.

Wednesday, May 21
2 p.m. Director Center Prevention
and Control Program Breakfast
Workshop. Lee Robinson, chair, dept. of
epidemiology, st. Louis Children's Research
Institute. 7:30 a.m.-7 p.m. School of Medicine CME.

4 p.m. Biomechanics & Molecular
Biophysics Seminar. "Co-Culture
Osteo- Osteo-Muscle Matrix: Matrix
Induction and Tissue Formation from an
Engineering Perspective." Thea Austin,
prof. of biomedical engineering.

Thursday, May 22
Neon: Genetics Seminar. Amal David
Kames. "The Structure and Shape of the
Human Central Nervous System." Christian
Waltz, prof. of biology and chemical
anatomy.

Tuesday, May 26
5 p.m. Barnes-Jewish Hospital Ethics
Committee Lecture & Book Signing:
"Why Justice Is Good for Our Health.
"Neumann Darling, prof. of surgical
anatology.

6 p.m. Biophysics Seminar.
"Infectious Disease in the Age of
Globalization." Julie Louise Gerberding,
prof. of公共卫生 policy and
administration.

E. M. Kipnis Lecture. "Genes That Control
the Size and Shape of the Human
Tissue."

M. Kipnis Lecture. "Genes That Control
the Size and Shape of the Human
Tissue."

Tumor Pathogens and Pathogenesis Seminar Series:
"Malaria Infection: Approaching the Host.
"Maria Moll berry, u. of medicine, portugal.
McThe Medical School.

Friday, May 16
5:15 p.m. School of Medicine One.
Craniofacial Plastic Surgery.
"Management of Head & Neck Cancer.
"Eric P. Newman, assoc. prof. of surgery.

5:45 p.m. School of Medicine One.
Craniofacial Plastic Surgery.
"Transoral Laser Microsurgery:
Management of Head & Neck Cancer.
"Eric P. Newman, assoc. prof. of surgery.

Cardiac Health Seminar.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

Friday, May 17
10 a.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

11:30 a.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

Friday, May 18
10 a.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

11:30 a.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

12:30 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

Friday, May 19
2 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

4 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

Friday, May 20
5:30 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

8 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

9 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

10 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

11 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

Friday, May 21
8 a.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

10 a.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

12:30 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

2 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

10 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

11 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

Saturday, May 22
10 a.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

11 a.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

12:30 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

10 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

11 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

Sunday, May 23
5:30 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

10 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

11 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

Monday, May 24
5:30 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

6 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

7 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

8 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

9 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

10 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.

11 p.m. School of Medicine One.
"Cardiac Health Seminar.
"Eric P. Newman, assoc. prof. of surgery.
For Hippe, Commencement is just the start of something new

BY JESSICA DAUTS

Friends. That's what Joyce Hippe had to sacrifice — temporarily — to earn a bachelor's degree in industrial and organizational psychology from University College in Arts & Sciences.

"Really, you just have to give up your social life," says Hippe, a mother of six who works full-time as a credit controller at Thomson Reuters in Arts & Sciences.

"There's just not enough time in the day." Her daughter Sarah Tesreau, who worked full-time while earning a bachelor's degree in management economics from UCollege, agrees. "I am liking my social time now after not having it for three years," says Sarah, who completed her degree in December.

University College has been a family affair for Hippe, who graduates May 16. Another daughter, Kelly Tesreau, is pursuing a bachelor's degree in elementary education and psychology, and will graduate from UCollege this spring.

The women carpooled to school and studied together at the library on Saturdays — though they each specialized in different areas.

For Hippe, industrial and organizational psychology was a perfect major because of her interest in how people interact and how to better manage work groups.

"I wanted to learn something that I could bring back to the office and contribute," Hippe says. "It's an excellent skill set for management as well.

"That is the strength of her major," says Byron, the University's Board of Trustees, who is teaching assistant in the business school, studied abroad in Japan and the Czech Republic, and worked at an intern at several galleries and museums.

"Being in a city like St. Louis has opened my eyes to the possibility of being an artist as a legitimate career," she says. "St. Louis has given me the confidence to be a painter. More than anything. I've discovered that my passion is possible."

Joyce Hippe and her daughter Sarah Tesreau attended University College, along with another daughter, Kelly Tesreau (not pictured). Joyce and Sarah will walk together during Commencement.

The demands of paying the bills made this studio in Walker Hall one of her favorite places. Living in St. Louis, she says, has opened her eyes to the possibilities of art as a career.

"Joyce is strongly motivated, serious and determined," Willis says. "She took two evening classes every semester until this final one, when she enrolled in nine hours; that's where her organizational skills and self-discipline really kicked in!"

"It was either take nine hours this semester, Hippe says, or wait until the next spring to graduate. She chose the former, and after "four months of hell," she says, laughing, she finally has her degree.

"A finished degree makes all the difference," says Hippe, who last week was inducted into Alpha Sigma Lambda, an honor society for evening college students. "I've proven myself capable and always done well in positions that I've had, but I felt that not having my degree finished was holding me back."

"Now, I can apply for higher positions with confidence," she says.

For the summer, Hippe will enjoy plenty of precious free time with her friends and her husband, Bob, a lab mechanic in the Department of Biomedical Arts & Sciences. But she doesn't plan on getting too used to just "hanging out." Starting in the fall, Hippe will take classes in both Spanish and French, two languages that will prove useful in her job at Thomson Reuters, a company with clients around the globe.

"Every time I take a class, it sparks my interest in something else," Hippe says.

"I don't think I'll ever be finished with school completely. There's so much to learn," she says.
Huang seeks solutions to affordable, quality health care

By Beth Miller

Providing quality health care in the United States and China has been a priority for Franklin Huang, Ph.D., that he has been working toward the past decade preparing for it. After receiving a degree in medical education at Harvard, Huang is heading to Boston to begin an internship for Basic Science and Massachusetts General Hospital. After completing his residency, Huang says he wants a career combining science and medicine that will allow him to work in some of the least developed and most impoverished countries.

"Using science to help people both here and in the developing world is really important to me," he says. "I'd like to figure out an innovative way to provide low-cost, high-quality health care both here and abroad."

It's no coincidence that in the five weeks before Commencement, Huang went to Boston, a mountain-country country in China and India, to study how to manage chronic disease in persons who are not in the low-cost, high-quality manner. While deciding between a career in medicine or medicine, he chose both.

He completed one year of doctorate, and then entered the School of Medicine for his first year of medical school, returned to Harvard to complete his doctorate and then returned to WUSTL to complete his medical degree.

In his last two years, Huang was part of the medical school's Medical Scientist Training Program (MSTP), although he had already completed his doctorate.

"We decided to take the unprecedented step of offering Franklin MSTP support," says Brian Sullivan, administrative director. "Although he has taken a unique path, he has given every indication he will go on to a successful career as a physician-scientist." 

The son of biochemists who influenced his focus on medicine and science, Huang says he has always been interested in the origins of disease as well as wanting to contribute positively to society. As an undergraduate, he founded a student-led organization that arranged activities focusing on international health and development. As a graduate student, he participated in a group that set up a lab equipment in good curation from Harvard affiliated to scientists in developing countries.

"At Harvard, I got to work with Paul Farmer (M.D., Ph.D., co-director of Harvard's Infectious Disease and Social Change program) and Arthur Kleineman, (M.D., chairman of Harvard's anthropology in Medicine department) who strongly influenced my thinking about medicine and health," Huang says.

The two were so influential to Huang that he and another WUSTL medical student developed a student selective on social medicine during their first two years at the medical school with the Harvard scientists' input. "We created a syllabus, contacted faculty, asked Brad Stonier (M.D., Ph.D., associate professor of medicine) to sponsor the course and enrolled other faculty to teach the course with us," Huang says. "We framed it as an ideal way for students to prepare for trips abroad to discuss issues they face."

At Harvard, Huang's mentor was Nancy C. Andrews, M.D.-Ph.D., who was then Harvard's dean for Basic Sciences and Graduate Studies. "Nancy was an ideal role model as a physician-scientist and was extremely bright, very motivated," says Michael R. DeBaun, M.D., professor of pediatrics and of neurology.

"Franklin was hard working, extremely bright and was able to integrate principled values and the art of medicine quite adeptly as a medical student," DeBaun says. Huang also is skilled in music. As a freshman, he co-founded the band HoldingSweetie Pie's. "Franklin is a skillful writer, lead singer and guitarist. The band still occasionally plays shows in the Boston area.

Creating positive environments is James' strength

By Cynthia Geoghegan

Marquita James studied her way through undergraduate school, determined to stretch herself intellectually rather than default to a dominant interest in literature — happily indulged from one major to the next.

"I tried to suppress my bibliophilia and changed my course of study many times," says James, who moved from political science to history to psychology. "I was just taking the classes that interested me."

When she declared her major one last time, in spring of her senior year, she was accepted by two schools. James had decided to go to both: Harvard University and the University of California, Berkeley. Her goal was to work as a policy analyst for the United Nations. "I love learning, and now teaching, so much that I am torn between going on for a Ph.D. or taking a job as an assistant professor," she says.

Marquita James discusses the finer points of her Mellon Mays research project with Gerald Izenberg, Ph.D., professor of history in Arts & Sciences — a project, Izenberg says, that has the making of a career and an identity.

She served two years as a fellow in the TRU Leadership Program, helping low-income and first-generation college students adjust to life in the WUSTL community. And, as a tutor in the Writing Center, she has eased the pain of many in their quest for an "A" paper.

"James has a gift and passion for creating positive environments. Determined to breathe life into an abolishing project, the St. Louis Family Court Mentoring Program, was on the verge of collapse three years ago, she helped secure resources and train students to mentor at-risk youth. In doing so, she and her classmate enhanced and solidified the program.

Marquita has an overwhelming desire to pursue justice in American society through the study of law and research but is also deeply devoted to helping her peers reach their goals," says Robert Koff, Ph.D., director of Cornerstone: The Center for Advancement Learning, where James has worked as a writing fellow and academic mentor. James' wide-ranging intellectual curiosity has taken her from a childhood fascination with marine biology — "I believed I could develop a way to interpret dolphins' language so that humans could communicate with them and learn the mysteries of the sea," she muses — to how cultural identity relates to politics.

The latter has been the focus of a Mellon Mays research project that James is pursuing under the direction of Gerald Izenberg, Ph.D., professor of history in Arts & Sciences.

"In the two years I worked with Marquita, I saw her mature from a general interest in gender identity through a sophisticated legal-historical analysis of the role of cultural identity in democracies founded on identity-blind individual rights," Izenberg says.

"Watching this process was enormously exciting. It was driven by Marquita's intelligence, ambition and social commitment, and it turned out to be the making not only of an essay but of a career and an identity," he says.

James leaves WUSTL with distinction. A Gates Millennium Scholar, she has been named to the dean's list five times, and the Women's Society recently presented her with the Harriet E. Switzer Leadership Award.

In the fall, she will begin law school at Harvard University or the University of California, Berkeley. Her goal is to work as a policy analyst for the United Nations.
Tennis ball inspired Kanjanaboos to study physics

BY MICHELLE COX

Pongsakorn Kanjanaboos, who goes by the nickname "Tom" because it is similar in pronunciation to a Thai nickname, has made the most of those opportunities, according to his mentor, Stuart Solin, Ph.D., the Charles M. Hohenberg Professor of Physics and director of the Center for Materials Innovation. "It is relatively uncommon for an undergraduate student to be so closely integrated in the research program and to be functioning like a graduate student at such an early age," Solin says. "But Tom is extremely bright and is a regular player in our lab. He is very motivated and is doing graduate-level research, and he has the obligations of his undergraduate classwork as well."

Despite the demands of his classes — he is double majoring in physics and economics — and his research, Kanjanaboos managed to carve out time to help other University students who faced challenges similar to his. "Tom is extremely bright and is a regular player in our lab. He is very motivated and is doing graduate-level research, and he has the obligations of his undergraduate classwork as well."

Helping people is something that comes naturally to Kauwe, so it's helpful to have a peer adviser who has been there. "Tom is poised for high-impact career," Solin says. "He is poised for high-impact career," Solin says.
Record

WASHINGTON UNIVERSITY IN ST. LOUIS

Gallery of Graduates

Combining science with service defines Mailhot

By NICK SCHONHEIMER

Though his interest in medicine began in middle school, it didn't blossom into a passion during his four years here, Mailhot says. "It has been predictable that, by 2020, the rate of diabetes in the Hispanic population will have increased by around 300 percent. I realized I really wanted to focus my project on the education and prevention of the disease." Because of his medical background and fluency in Spanish, Mailhot already had been giving talks at various locations on behalf of La Clinica on diabetes and its prevention. For the first phase of his project, he needed to assess how exactly the Hispanic community is being affected by diabetes. "I conducted surveys at La Clinica to assess the prevalence of the disease among the Hispanic community in South St. Louis, as well as the amount of pro-diabet- ic behaviors like smoking, diet and lack of exercise," he says. He knew that he wanted to develop a long-term program that would hopefully decrease pro-diabetic factors and the prevalence of the disease itself. During the summer, a Hispanic health fair at a Spanish church in St. Louis presented a great opportunity.

"Organizers of the fair contacted me through La Clinica to speak about diabetes, take blood pressure readings and answer questions," Mailhot says. "It seemed like the disease community was the perfect one around which to develop the second and third phases of my project. I decided to start a series of discussions in which diabetes, behavior experts, dieticians and psychologists would speak about the effects of diabetes related to their specific fields. We held 12 weekend sessions, which were quite successful!"

Mailhot, whose mother is from Honduras and father's family is from Quebec, Canada, also was heavily involved in the Association of Latin American Students, serving as president his junior year. An Ameika Rodriguez Scholar, Mailhot is serving his second year as a residential adviser in St. Elizabeth's Residential College. He was inducted last year into the Phi Beta Kappa national honor fraternity. He also has served as a choreographer and dancer for Carnaval and Diwali.

"Working with those in need continues to be his most focused passion," said his advisor, Duane Benton, J.D., a federal large Indian corporate clients.

"He is a very caring individual who goes above and beyond in taking care of his community. The entire WUSTL community has benefited from his time here," she says.

Nash rides South Asian back roads to legal career

By GERRY EYVERING

When law student Andrew Nash graduated May 16, he won't be far from his mid-Missouri hometown of Jefferson City. But for Nash, the journey from rural Missouri to St. Louis has been of epic proportions.

"I've really enjoyed working there during my four years here," Mailhot said. "Though my responsibilities change from year to year, I was mainly involved in triage work and translation." While Mailhot remained involved after Mailhot was awarded the 2007 EALF's Social Change Grant from the Office of Community Service. The grant provides $5,000 for an undergraduate student to develop and implement an innovative community project. Mailhot saw the grant as a perfect opportunity to help educate the St. Louis Hispanic community on the dangers of diabetes.

"Unfortunately, diabetes is having quite an adverse effect on the Hispanic community," Mailhot said. "I have been predict- ing that, by 2020, the rate of dia- betes in the Hispanic population, "will have increased by around 300 percent. I realized I really wanted to focus my project on the education and prevention of the disease." Because of his medical background and fluency in Spanish, Mailhot already had been giving talks at various locations on behalf of La Clinica on diabetes and its prevention. For the first phase of his project, he needed to assess how exactly the Hispanic community is being affected by diabetes. "I conducted surveys at La Clinica to assess the prevalence of the disease among the Hispanic community in South St. Louis, as well as the amount of pro-diabetic behaviors like smoking, diet and lack of exercise," he says. He knew that he wanted to develop a long-term program that would hopefully decrease pro-diabetic factors and the prevalence of the disease itself. During the summer, a Hispanic health fair at a Spanish church in St. Louis presented a great opportunity.

Ray Mailhot stands in front of La Clinica medical clinic in St. Louis, where he spent four years assisting patients and helping with diabetes research and education among Hispanic people.

"He is a very caring individual who goes above and beyond in taking care of his community. The entire WUSTL community has benefited from his time here," she says.

Nash recently returned from a trip to India, where he and classmate Samir Kaushik won the prestigious D.M. Harish Memorial International Law Moot Court Competition. Nash took individual honors, winning second best-orator in the competition.

"Andrew has a very global vision that would be hard to find in someone twice his age, and it's not a naive vision," says Michael Peit, J.D., assistant dean for international programs in the School of Law. "He has a very mature view of how the world works and where the world is going. It's a fantastic student and one of the best legal writers I've ever seen."


"I conducted surveys at La Clinica to assess the prevalence of the disease among the Hispanic community in South St. Louis, as well as the amount of pro-diabetic behaviors like smoking, diet and lack of exercise," he says. He knew that he wanted to develop a long-term program that would hopefully decrease pro-diabetic factors and the prevalence of the disease itself. During the summer, a Hispanic health fair at a Spanish church in St. Louis presented a great opportunity.

"He is a very caring individual who goes above and beyond in taking care of his community. The entire WUSTL community has benefited from his time here," she says.

Nash recently returned from a trip to India, where he and classmate Samir Kaushik won the prestigious D.M. Harish Memorial International Law Moot Court Competition. Nash took individual honors, winning second best-orator in the competition.

"Andrew has a very global vision that would be hard to find in someone twice his age, and it's not a naive vision," says Michael Peit, J.D., assistant dean for international programs in the School of Law. "He has a very mature view of how the world works and where the world is going. It's a fantastic student and one of the best legal writers I've ever seen."


"I conducted surveys at La Clinica to assess the prevalence of the disease among the Hispanic community in South St. Louis, as well as the amount of pro-diabetic behaviors like smoking, diet and lack of exercise," he says. He knew that he wanted to develop a long-term program that would hopefully decrease pro-diabetic factors and the prevalence of the disease itself. During the summer, a Hispanic health fair at a Spanish church in St. Louis presented a great opportunity.
Pitt sings a pretty tune earning two engineering degrees

By BY LIAM OTTEN

Ilisson Pitt entered Wash-ington University in 2004 for a major of what an engineer actually does. She left this spring having participated four years in a program that teaches high-school students the myriad things that engineers do.

"I was never exposed to any indoctrination about engineering before I came here," Pitt says. "I don't know why that is. But working with St. Louis city high-schoolers, most of them minorities, for four years or weekends gave me a sense of enabling, of giving back."

Pitt, who graduates May 16 with degrees in chemical engi-neering and in systems science and engineering, always has been strong in math and science. "I wanted chemical engi-neering because I love chemistry," she said. "And I like efficiency and organization. So, I decided to work toward both degrees through the Process Control Systems Program."

"She has proven adapt at prob-lem solving," she is an exceptional student," says Ervin Y. Rodin, Ph.D., professor of applied math and systems science. "She rapidly mastered object-oriented com-puter programming, which is a crucial tool for the in-depth analysis of complex systems, but can be counterintuitive. Allison demonstrated excellent grasp of this kind of creative problem solving.

"She also is remarkably articu-late and comfortable presenting her work," Rodin says. Pitt received a scholarship from the National Society of Black Engineers (NSBE) as a high-school senior. She was secre-tary of the WUSTL chapter her sophomore year; vice president junior year and president her senior year.

"As president, I've learned about leadership and group dynamics," Pitt says. "I'm part of harnessing a passion in our members to increase the number of culturally responsible black engineers who excel aca-demically, succeed professionally and positively impact the community. This is a national NSBE goal, but we work very hard on it here."

Through NSBE, Pitt has worked in tutoring and mentor-ing programs like the high-school program. She has been influential in getting an NSF Educational Outreach Community Help pro-gram going in north St. Louis, where it helped network a com-munity center using WUSTL computers.

Pitt, who was accepted by 10 universities, chose WUSTL because she says she felt a warmth and caring here that she didn't feel in some other schools she visited. She began her aca-demic career as an Ervin Scholar.

"The previous year's scholars were so helpful and understand-ing," Pitt says. "When we started the regular school year, it was special to have a tightly knit group of friends going into the challenge of college."

By TONY FITZPATRICK

Allison Pitt (left) says older students helped her when she came to WUSTL. As an upperclassman, she was happy to return the favor, visiting with sophomore engineering student Troy Cole at Gregg Residence Hall in April.

Kyle Thiel, whose work centers on issues of sustainability, with a wine rack he constructed from left-over scraps of industrial freight.

Thiel takes ideas and makes them concrete — and sustainable

E nvironmental discussions are often long on good intentions and short on specifics. "I'm interested in sustainability, but I'm also interested in how it's quantified," says Kyle Thiel, who will receive his master's of architecture May 16 from the Sam Fox School of Design & Visual Arts. "Take photovoltaic panels. What are their life cycle costs? What's their payback? Do they increase the value of the project?"

"Those arguments, more than global warming, will persuade developers. It's a dollars-and-cents thing," he says.

Thiel, who graduated from Sam Fox School of Design & Visual Arts Graduate School of Architecture with an award for "demonstrated excellent grasp of the difficult practicabilities of green development," says he explored issues of sus-tainability from the urban scale all the way down to building design, materials and systems integration," says Bruce Lindsey, dean and the E. Desmond Lee Professor for Community Collaboration. "He really ex-tends the full range of issues," Thiel was raised in Wichita, Kan., where his parents teach high-school chemistry and math. "That's a woodworker's town, loves sewing and making quilts," he says. "I think that sense of mak-ing things is what engaged me about architecture — the idea that ideas can be made concrete."

After earning a bachelor's degree from Kansas State University in 2000, Thiel worked for two firms in New Haven, Conn., where jobs included a New Haven high school and a lab building for University of California, Los Angeles. Yet Thiel missed academia and, in 2006, he arrived on the WUSTL campus. "I have aspirations to teach, so an advanced degree is necessary," he says.

In his first semester, Thiel joined a regional planning studio that would win a national Edu-cation Honor Award from the American Institute of Architects. Co-sponsored by the University, the studio developed designs that engineers do. Thiel worked on site at three stations in and around St. Louis. The fol-lowing spring, he worked on a hypothetical extension to the Kin-gston Art Museum in Fort Worth, Texas, and last fall designed a live-work tower — conceived as a kind of small-business incubator — for a site on the Chicago River just outside the Loop.

Yet, all the while, Thiel made a particular study of issues relating to development and sustainability and reached a conclusion: "The computer models to analyse how spe-cific design choices would function under real-world weather condi-tions, indeed, such modeling helped shape his final thesis proj-ect: a two-story, 120-square-foot guts high school in rural Worden, Ill."

Spanning an existing freight rail line, the building consists of two long, narrow wings, slightly staggered and bridged by a cross-piece. Though the design incor-porates "passive" conservation techniques — north-facing sky-lights, for example, would natu-rally light most classrooms — computer modeling shows Thiel is on-target for maximum effi-cency.

"A particular type of wall con-struction gives me a certain R-value (a measure of thermal insulation), which in turn affects heating and cooling costs," he says. Alternatively, "adding an extra six inches to the exterior envelope might cut HVAC usage by 20 percent," he says.

Yet such optimizations are com-plicated by the sheer number of variables in play. "Since the win-dow systems, walls, systems, roof-ing systems...it can be very difficult to make the case that a par-ticular modification will equal a particular result," Developing clear, quantifiable rules-of-thumb is a real challenge," he says.

It's a challenge: Thiel will face in current after graduation. Last month, he accepted a position with the St. Louis firm Cannon Design and began work in June. Meanwhile — demonstrating green principles of conservation and restoration — Thiel and his wife, Kathy, recently bought a 106-year-old brick house in St. Louis' Forest Park Southeast neighborhood. "It's a badge of honor for an architect," Thiel says. "To live in your own home." Thiel says. "They are defi-nitely sustainable in terms of strength, but not very energy-friendly. The backyard is a bit of a mess, so my goal for the sum-mer is to get the space usable for a family ground space."

"When it comes to sustainability, I'm trying to live it as well as preach it," he says.

University of Connecticut in 2000, Thiel worked for two firms in New Haven, Conn., where jobs included a New Haven high school and a lab building for University of California, Los Angeles. Yet Thiel missed academia and, in 2006, he arrived on the WUSTL campus. "I have aspirations to teach, so an advanced degree is necessary," he says.
When Sara Ward was 12 years old, she and her mother moved from her native Moscow to the United States. Her Russian roots inspired her to this day from her very slight accent to her embodiment of Russian warmth and hospitality.

Vasilieva's family heritage is also manifest in her parents and grandparents' accents, her people, and Vasilieva is carrying on that tradition. She graduates May 16 and is expected to be at the top of her BSN class, majoring in both accounting and finance.

Even though she loves her numbers-intensive business side, she deviates from her mathematical heritage in a significant way: She also has a passion for languages and foreign cultures, especially those of Spain. In her sophomore year, Vasilieva spent a semester in Madrid during her junior year — an experience she considers the pinnacle of her time at WUSTL. During the past few summers, Vasilieva has interned with Deloitte & Touche in Moscow, which enabled her to visit family and old friends.

"Even though Moscow size doesn't feel like a foreign place to me, she does appreciate the differences between her Russian heritage and her adoptive country. Still, she says, she feels more American than Russian in her outlook on life, and that would make it difficult for her to ever settle in Russia — and especially in Moscow.

"I'm not very confrontational, and Moscow, you have to be pushy," she says, "I think I'm too nice for Moscow."

"I felt like I could go about my work in more of a holistic and preventative way," she says, "When I started to understand more about social justice and social action issues, I knew that it was a really good fit for me personally and professionally."

Ward thought that she found her true calling through family law and the legal system and soon realized that the field of social work was her true home.

"In my, social work is about social justice," she says. "I developed a support-group curriculum for children with a formerly incarcerated mother in the Let's Start program," Ward says. "Some of the topics addressed are identifying and managing emotions and communicating. This curriculum parallels a research-based program we are piloting that helps formerly incarcerated women address parenting issues."

Ward also collaborated on a trip to Jena, La., to be a part of the large civil rights demonstration in support of the "Jena Six" students.

"I felt like I really had an opportunity to do something," she says. "People in Jena are dealing with so many of the issues that are important to me, and it was an incredible experience to be a part of the demonstration. Just being on the bus for 20 hours was an amazing learning experience in itself."

"I felt so lucky to be on a bus with a diverse group of people from the community who were concerned about the same issues," Ward says.

"I always think of my work as, in a sense, being by and for the community," she says. "They do violence prevention work with children in the townships around Cape Town."

"I think it was looking for the dream job that combines all of these things," she says. "I'm going to remain open to going anywhere where I think the work is that I need to be doing."
Ceremony

Peretz to serve as grand marshal — from Page 1

Violent Weather Plan

The decision for implementing the Violent Weather Plan for Commencement ceremonies will be made by 7 a.m. May 15. Major locations and TV stations will be given the information, and it will appear on the WUSTL e-mail.

Practice of Radiation Oncology," is called the "bible" of his spe-

surgery, renowned researcher of humane letters; and Emeritus in the Humanities, ly recognized business execu-

honorary degrees will be award-

College, Matthews did graduate

Knows The Game" (1988),

played Told By One Who

four best-selling books, includ-

Sen. Edmund Muskie (Maine)

Senate on the staffs of

Project.

Examiner's series of scoops on

dedicated columnist.

his book, "Principles and

grand marshal Carlos A. Perez,

Ph.D., WUSTL professor emeri-

Visual Arts, for the College of

Art/Graduate School of Art

and professor of political science, Kling, Ph.D., former provost, was a scholar of the governments

of provost. In 1980, he received

the additional title of executive vice chancellor.

For more information on the memory care center, call Erin Farrell at 935-4917 or e-mail klingmemorial@wustl.edu.

Kling memorial service set for June 1

A memorial service for Merle Klingen, Ph.D., former provost, executive vice chancellor, dean of the Faculty of Arts and Sciences, and professor of political science, will be held at 3 p.m. May 15 in the Whitaker Hall Auditorium. A reception will follow in the Whitaker Hall Atrium. In addition to the scheduled Commencement, guests will be invited to share their thoughts of Klingen at 9 a.m. and 3 p.m. May 15 in the Department of Radiation Oncology in 1991. He served as department head until his retirement in 2002. Perez led the way in enhanc-

radiotherapy delivery. He developed branching technique that runs inside the head. Since radiation treatment becomes a viable treatment option, Perez was the first to develop an alternative to mastectomy.

Matthews is the author of four best-selling books, includ-

Michael J. Sandel (J.D. '73), WUSTL trustee, for the College of Law and professor of law in the School of Law, for the College

Carolyn Mathis, director of Admissions, for the College of Liberal Arts and School of Public Service.

During a 47-year career,

Chopra, who treated my family were very

family suffer from illness," Chopra said. "They come to the U.S. from India to get the best treatments. My grandfather has a cancer that came back after 11 years in remission. And my aunt and other rela-

"Things might have been dif-

if I had seen medicine fail," Chopra said. "But the physicians who treat my family were very competent and caring." Chopra said he was committed to model this care. "Washington University has prepared me for this," he said.

Commencement speakers

More than a dozen distin-

conferral of academic degrees.

Princess Elizabeth, the daughter of Prince Charles, was made a countess.

Karan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.

Karaan adds a humorous and

but personal. Chopra said. "But the physicians

in the Athletic Complex.

Farrell at 935-6917 or e-mail klingmemorial@wustl.edu.
Henry Biggs, Ph.D., associate dean in Arts & Sciences and director of undergraduate research, examines the presentation of senior Matt Riedel, a psychology and biology double major in Arts & Sciences, during the spring Undergraduate Research Symposium. Riedel's project was on the link between aerobic exercise and increased cognitive performance and reduced stress. Biggs organizes the annual symposium. "This is probably the most fun and most rewarding job I could have," Biggs says.

Henry Biggs, Ph.D.
Associate Dean in Arts & Sciences and Director of Undergraduate Research, is a bit of a Renaissance man. Born in St. Louis, Biggs earned a bachelor's degree in Latin from Harvard University, traveled in Germany and France, swam the English Channel, released three rap CDs under the moniker "Headmess," completed a business degree at night with three children in tow, and included work by more than 170 students from each of the Denning Campus and the School of Law.

"To say that undergraduate research at the University has bloomed under Biggs is an understatement," says Henry Biggs' grandmother, Theresa Biggs. "Theresa still brings flowers to the undergraduate experience," Biggs says. "And I'm excited about that, but, you know, working at the University has given me different perspectives coming out of social science and humanities."