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Record

May 18, 2000

Volume 24 No. 32



Washington University in St. Louis



Speaker

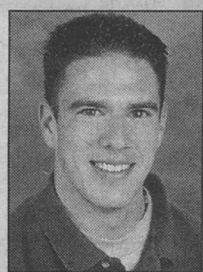
Class president
applies political
savvy on campus

By DAVID MOESSNER

Whoever said there is no such thing as a free lunch never worked as a congressional intern.

Spending the summer of 1997 on Capitol Hill, Gabriel Greenbaum helped handle the usual array of mundane-but-necessary chores for Rep. Jack Quinn of New York. "Nothing too exciting," said Greenbaum, who has risen to his own political heights as a three-year class president here at another prominent Hilltop, and in that role will address Commencement Friday, May 19.

"I did get to work across the hall from Sonny Bono, which was entertaining," Greenbaum noted. "But the main education was watching the lobbying. Dairy



Greenbaum: Class president to speak

producers brought ice cream over for everyone all summer! We had free lunches all the time. It certainly had its perks." Greenbaum also witnessed enough to steer him away, at least for the time being, from a career on the Hill. "I've seen what great things can be done for the constituent, but I've also seen how bureaucracy can rear its not-so-lovely head — all the paperwork, all the buildup between congressmen, all the good ideas that can get stymied at times."

The next summer proved more rewarding, if less tasty, as Greenbaum, who hails from Swampscott, Mass., interned back home in the congressional district office of Rep. John Tierney of Massachusetts. "I got to see how hands-on and positive

See **Speaker**, page 10



DAVID KILPER

Jubilation reigns as graduates crowd Brookings Quadrangle for Commencement. Civil rights leader Julian Bond will address this year's class.

Jubilation! 139th Commencement to be held May 19

On Friday, May 19, 2,634 men and women will enter the Brookings Quadrangle as Washington University students and leave as alumni.

Chancellor Mark S. Wrighton will award the degrees in the University's 139th Commencement ceremony, which begins at 8:30 a.m. Of the 2,634 candidates, 1,327 are undergraduate students and 1,307 are graduate and professional students.

Among the graduate students are 465 who will receive doctoral-level degrees. There are 138 candidates for the doctor of philosophy degree in the Graduate School of Arts & Sciences; 42 for the doctor of science degree in the Henry Edwin Sever Institute of Technology; 181 for the doctor of law degree in the School of Law; and 104 for the doctor of medicine degree in the School of Medicine.

In the event of rain, an abbreviated ceremony will be held in the quadrangle, and souvenir plastic ponchos will be provided. In the event of violent weather, the undergraduate Commencement exercises will move to the Athletic Complex, still beginning at 8:30 a.m. The graduate and

professional degrees will be awarded at the regularly scheduled late morning and early afternoon ceremonies of each school. (See *schedule on page 4.*)

A decision on moving to the violent weather schedule will be made by 7 a.m. the day of Commencement. This notice and other up-to-the-minute information on

Commencement Week activities will be available on the Commencement hotline at 935-4355.

Regardless of weather, guests may choose to watch the ceremony via closed-circuit television in either Brown Hall Auditorium or Edison Theatre.

Civil rights leader Julian Bond will deliver the Commencement

address. Bond, chairman of the board of the National Association for the Advancement of Colored People, has been on the cutting edge of social change for 40 years as an activist who faced jail for his convictions, as a member of the Georgia General Assembly, as a university professor and as a

See **Celebration**, page 10

Student designers reach out with posters

By LIAM OTTEN

Typography, generally speaking, is not a hotbed of social activism. Unless, of course, you're talking to Sarah Spurr, coordinator of the Visual Communications Area at the School of Art, who regularly teaches a section on graphic design as a tool for social change.

May is National Mental Health Awareness Month. Accordingly, Spurr invited guest speakers from the Alliance for the Mentally Ill—NAMI of St. Louis, a local affiliate of the National Alliance for the Mentally Ill, to share their stories with the 38 juniors enrolled in her "Typography 2" class. In response,

the students created a series of posters, most in the 2 feet by 3 feet range, that address both the facts and the myths surrounding mental illness.

This week those posters began a two-week run at Westfield Shoppingtown Crestwood in South County. The exhibition is on view through May 29 in the Famous-Barr Concourse.

"None of us really knows what mental illness means until we're confronted with it in our own lives," explained Spurr, whose own daughter was diagnosed with a severe mental illness four years ago. "We may think we know something about depression or schizophrenia, but the reality is

that, as a society, we push these illnesses under the rug."

Spurr said that, following her daughter's diagnosis, she found precious few resources for help or information. "It blindsided me," she recalled. Eventually a friend put her in touch with NAMI of St. Louis, and she has since become active in the organization, teaching courses to other affected parents and relatives and even serving on the board of directors.

"We tried to explain to the students what it's like to have someone you love stricken by mental illness," said Richard Stevenson, NAMI executive director, whose sister suffered

See **Posters**, page 4

Public consortium launches final phase of genome sequencing

The Human Genome Project international consortium has announced the official launch of the second and final phase of the human genome sequencing project — the effort to decipher the 3 billion DNA letters that make the human body. The milestone marks the transition from the initial phase, generating a "working draft" of the human DNA, to the final phase, producing the complete finished sequence. Sixteen genome centers around the world, including the School of Medicine, officially began Phase two May 9.

Phase one, launched in March 1999, has produced coverage of the vast majority of the human chromosomes in 14 months, at a

total cost of about \$300 million. The last remaining DNA from this first phase already is in the centers' sequencing pipelines and will flow into public databases over the next six weeks.

The goal of the first phase was to create the working draft, covering 90 percent of the euchromatic portion of the human DNA, by sequencing large clones representing segments from the genome. Draft sequence allows scientists to identify directly the vast majority of the human genes, although the sequence itself still contains gaps and uncertainties.

The centers have so far produced and released sequences from overlapping clones contain-

ing a total of 3.2 billion DNA letters. Allowing for the overlaps, these segments cover approximately 85 percent of the human genome.

The remaining clones that will complete the working draft were selected in late April and now are in process at the 16 centers. The final data are flowing into public databases at a rate of 10,000 DNA letters per minute and will all be deposited by mid-June.

The working draft is assembled in a two-step fashion. Each clone is first assembled from its sequence information. The various clones can then be assembled together into a layout on the human genome, based on their chromosomal location.

The first comprehensive layout of the human genome was constructed in mid-April by scientists in the international consortium. The layout shows the chromosomal positions and the detailed relationships among the more than 20,000 large clones used to sequence the genome; it also spotlights the remaining segments to be covered.

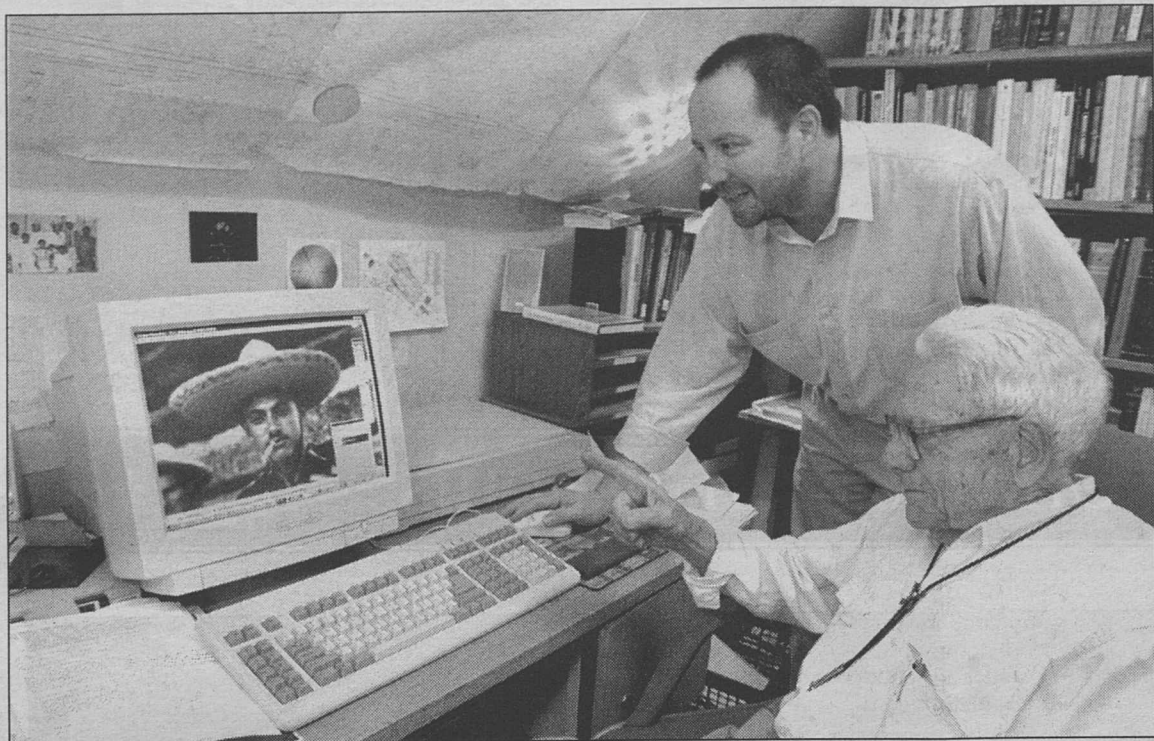
"It's breathtaking to see the DNA sequences arrayed along the human chromosomes, from one end to the other," said Robert H. Waterston, M.D., Ph.D., the James S. McDonnell Professor of Genetics, head of the Department of Genetics and director of the Genome Sequencing Center at the medical school. "The individual

contributions have fallen together to yield a global picture. We can now turn to plugging the remaining holes."

The sequence information from the working draft has been immediately and freely released to the world, with no restrictions on its use or redistribution. The information is scanned daily by scientists in academia and industry, as well as by commercial database companies providing information services to biotechnologists. Already, many tens of thousands of genes have been identified from the genome sequence.

For example, the working draft has allowed human

See **Genome**, page 10



Associate Professor of Anthropology Glenn D. Stone, Ph.D. (standing), works with John W. Bennett, Ph.D., emeritus professor of anthropology and Distinguished Anthropologist in Residence, on creating a database of Bennett's photographs complete with text and Bennett's own narration.

New digital archives being created

By CHRISTINE FARMER

Three faculty projects will be made available in digital form, improving access to unique scholarly resources and providing important opportunities for both teaching and research, under the creation of new digital archives by the University's Digital Cultural Resources Group (DCRG).

The DCRG chose the three projects from a variety of faculty proposals. To be selected, a project had to involve the creation of a useful new resource for teaching or research in the arts, humanities or social sciences, and, equally important, provide opportunities for the DCRG to learn about issues of copyright, intellectual access and technology.

The group will support the following digital projects with technical advice and funding:

Glenn D. Stone, Ph.D., associate professor of anthropology in Arts & Sciences, will oversee the creation of a database of photographs with accompanying narrative drawn from the extensive collection of John W. Bennett, Ph.D., emeritus professor of anthropology and Distinguished Anthropologist in Residence. The database will serve as a record of Bennett's long career and provide insights into what it means to be a cultural anthropologist.

Scanning in Bennett's photos and slides is under way. "John Bennett has amassed an extraordinary collection of thousands of images over a 65-year career in anthropology," Stone said. "It includes early archaeology in the American Southwest, settlers in the Great Plains of the western United States and Canada, Midwestern Amish farmers, postwar Japan, African

pastoralists and agricultural cooperatives in Israel. The images themselves are stunning, and, in narrating the collection, John is tapping into a remarkably rich vein of anecdotes and analysis."

Stone said the project should be unveiled in the fall but will continue to be updated.

"Rather than having the Bennett archive wind up in a crate in some library's special collections vault, we are making it available on the Web, and in the process we are capturing a wealth of contextual information that was never published," he said. "Much of the narration will appear as text, but some of the spellbinding stories will be heard in John's own voice by using streaming media."

Work on the other two projects will begin this summer.

Jeigh Singleton, associate professor in the School of Art's fashion design program, will develop a database of photographs of garments from a collection donated to the University by the late Eula Fulton, an important figure in fashion marketing in St. Louis and nationally. Singleton will use the database in his teaching. His students will expand the usefulness of the resource by contributing drawings and documentation.

Jacqueline Tatom, assistant professor of architecture and director of the School of Architecture's Metropolitan Research and Design Center, will produce a series of digital maps of the St. Louis area. Using the Geographic Information System program, Tatom will develop a database using information about neighborhoods, buildings and other features drawn from old maps held by the Missouri Historical Society and contemporary maps provided by offices of St. Louis City and County. The

database will be an important resource for research and teaching in architecture and in courses in American culture studies and other programs.

"This project is a unique opportunity to bring varied research within the University together in an interdisciplinary way, as well as to reach out to research institutions in the region," Tatom said.

The DCRG was appointed in September by Shirley K. Baker, vice chancellor for information technology and dean of University Libraries, to study the availability of services to support faculty use of digital resources. It is composed of librarians and professional staff from the Hilltop Campus and is co-chaired by Peter J. Kastor, Ph.D., assistant director of American culture studies in Arts & Sciences, and Victoria Witte, assistant dean for information services, University Libraries.

"This group will identify specific resources that will prove useful to our community, whether that means providing greater access to existing materials or fostering the creation of new materials," Baker said.

Witte noted: "In addition to the discrete contributions of each individual project, this initiative as a whole will provide the opportunity to explore some of the most important issues relating to digital materials. It will enable the library to establish local protocols for the acquisition, cataloging and long-term storage of digital media, including still images, sound and video."

She added that the projects also will allow the library opportunities to build collaborative relationships within the University as well as with outside institutions, including other St. Louis area libraries.

OVATIONS!

New season provides eclectic array of cutting-edge theater, music, dance

By LIAM OTTEN

Washington University's ever-eclectic Edison Theatre OVATIONS! Series, now in its 28th year, has announced its 2000-2001 season, presenting its usual wide-ranging mix of exuberant dance, varied musical traditions and both classic and cutting-edge theater.

The 2000-2001 OVATIONS! Series will feature 12 new events ranging from established artists to emerging talents, of which 11 are St. Louis premieres.

"I think it's important for both Washington University and the St. Louis community to be able to experience first-class works of art," said Henry I. Schvey, Ph.D., director of Edison Theatre and chair of the University's Performing Arts Department in Arts & Sciences. "The Edison's mission is to showcase artists of the highest order — artists who are both accessible and who take audiences on imaginative journeys to places they may not have been before."

For theater lovers that journey begins with The American Repertory Theater's tragicomic fairy tale "The King Stag," designed by Tony Award-winner Julie Taymor, famous for her design of Disney's Broadway version of "The Lion King." Next up is Gareth Armstrong's one-man show "Shylock," which takes the Bard's magnetic creation as the launching point for a theatrical investigation of the roots of anti-Semitism.

The Guthrie Theater returns to the Edison stage with "Molly Sweeney," their fourth collaboration with the great Irish playwright Brian Friel, while the high-flying monologist Eric Bogosian makes his St. Louis debut with "Wake Up and Smell the

Coffee," a scathing and hilarious look at the American Dream. The season rounds out with The SITI Company in "War of the Worlds," Anne Bogart's examination of the life and work of Orson Welles.

For music lovers, the season kicks off with the rollicking Mingus Big Band, an ensemble of

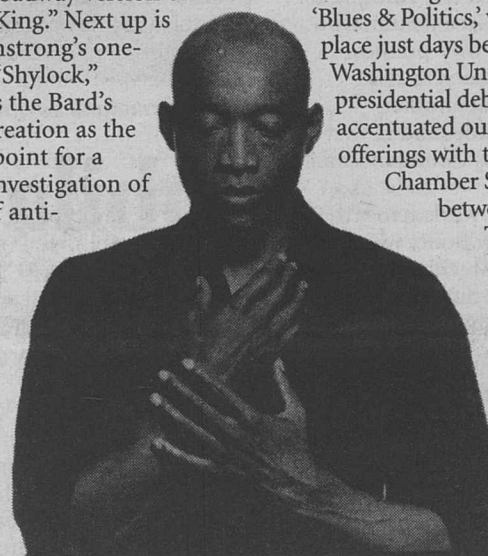
14 musicians under the artistic direction of Sue Mingus, widow of the great composer Charles Mingus. Classical buffs will be treated to the Edison's new Mini Chamber Series, which will present a trio of intimate concerts by renowned pianist Thomas Labé; world-class cellist Michael Haber and the University's own virtuoso pianist Seth Carlin; and the period-instrument chamber group The Kingsbury Ensemble.

Once again, Edison Theatre will join forces with Dance St. Louis to present some of the finest dance companies working today. Rennie Harris/PUREMOVEMENT returns to the Edison stage with their latest show, "Rome & Jewels," a hip-hop refashioning of Shakespeare's "Romeo and Juliet." Shapiro & Smith Dance bring their trademark wit and no-holds-barred athleticism to the Edison for a St. Louis debut, while the great Bill T. Jones/Arnie Zane Dance Company comes to town with Jones' latest evening-length creation, "You Walk?"

"We have some really spectacular events lined up," Schvey noted. "Rennie Harris' hip-hop 'Romeo and Juliet' is sure to be fascinating, as is the Mingus Big Band's 'Blues & Politics,' which takes place just days before Washington University's presidential debate. We've accentuated our classical offerings with the Mini Chamber Series and, between Julie

Taymor's 'The King Stag' and Anne Bogart's 'War of the Worlds,' we'll see two of the country's finest theater groups.

"A university's educational mission is served not only through classrooms, but also by bringing students and the community into contact with artists of this caliber," Schvey



MacArthur fellow and internationally renowned choreographer Bill T. Jones, of Bill T. Jones/Arnie Zane Dance Company, comes to campus as part of the 2000-2001 Edison Theatre OVATIONS! Series.

"I encourage my colleagues and the St. Louis community to see the OVATIONS! Series as a living laboratory of human experience."

HENRY I. SCHVEY

concluded. "With that in mind, I encourage my colleagues and the St. Louis community to see the OVATIONS! Series as a living laboratory of human experience."

For more information or to request a season brochure, call the Edison Theatre Box Office, 935-6543.

Wrighton named to National Science Board

President Bill Clinton has appointed Chancellor Mark S. Wrighton to serve as a member of the National Science Board (NSB).

The National Science Foundation Act of 1950 established the NSB to serve as science policy adviser to the president and the Congress and as the governing body for the National Science Foundation. The board is composed of 24 part-time members, appointed by the president and confirmed by the Senate.

Members are selected on the basis of their eminence in basic, medical and social sciences, engineering, agriculture, education, research management and

public affairs to represent the science and engineering community. The board currently includes faculty and administrators from Tulane University, the Berkeley and Los Angeles campuses of the University of California, the University of Virginia, Cornell University, Massachusetts Institute of Technology and others. Representatives of industries including IBM, E.I. DuPont de Nemours & Co. and TEI Industries Inc. and of independent research institutions also serve on the NSB.

Wrighton, who also holds an appointment as a professor of chemistry in Arts & Sciences, spent 23 years at MIT before

becoming chancellor here in 1995. He was MIT provost from 1990 to 1995. From 1987 to 1990, he was head of the department of chemistry, and in 1989 he was appointed the first holder of the Ciba-Geigy chair in chemistry. Wrighton started his career at MIT in 1972 as assistant professor.

He is the author or co-author of more than 400 articles published in professional and scholarly journals and was awarded the MacArthur Fellowship in 1983. He received a bachelor's degree in chemistry from Florida State University and a doctorate in chemistry from California Institute of Technology.

Record

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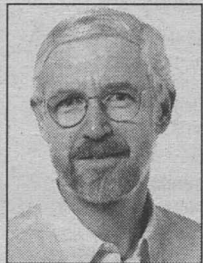
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Medical School Update

Ulcer bug might not always have plagued humans

By LINDA SAGE

The bacterium that causes stomach ulcers might not have been with humans forever, a new study suggests, contradicting a long-held assumption. Comparing pieces of DNA from *Helicobacter pylori*, scientists discovered that strains from Peru resemble those from Spain and not those from eastern Asia.



Berg: Studies *Helicobacter pylori*

"My favorite interpretation of this finding is that the Spanish brought *H. pylori* to Peru when they conquered the Incan empire nearly 500 years ago and that the bacterium was not present in the ancestors who crossed the Bering Strait from Asia more than 10,000 years ago," said Douglas E. Berg, Ph.D., the Alumni Professor of Molecular Microbiology and professor of genetics.

Berg and collaborators in Britain, China, Guatemala, India, Japan, Peru, South Africa, Spain, Sweden and the United States report their findings in the June issue of the *Journal of Bacteriology*.

H. pylori is carried by more than half the world's population, and it can thrive in the stomach for years. Whereas some people suffer no apparent consequences, others develop peptic ulcer disease. Gastric cancer, the leading

cause of cancer deaths in some developing countries, also has been associated with *H. pylori*.

Analyzing DNA from more than 500 strains from five continents, Berg's group focused mainly on a region called the *cag* pathogenicity island. One part of this region contains apparently vestigial genes, and it varies in size because some strains have lost pieces of DNA whereas others have inserts. Also, some base pairs, the building blocks of DNA, have been substituted for others.

As well as measuring the size of the vestigial segment, the researchers examined the DNA sequences of *cagA*, a gene that lies just next to it, and *vacA*, which lies elsewhere in the chromosome. The *cagA* gene codes for a protein that, when phosphorylated, alters the internal communication system of human cells, whereas *vacA* codes for a toxic protein.

The DNA analysis classified the *H. pylori* isolates into five types. Type I DNA motifs predominated in the strains from Spain, Peru, Guatemala and native Africans. Type II motifs were most common in the Chinese and Japanese strains, whereas type III motifs predominated in the Indian strains. Each of the three motifs was common in the strains from northern Europe. The rare type IV motif showed up in one English strain and two strains from West Virginia, and the type V motif was found in a few of the Indian strains.

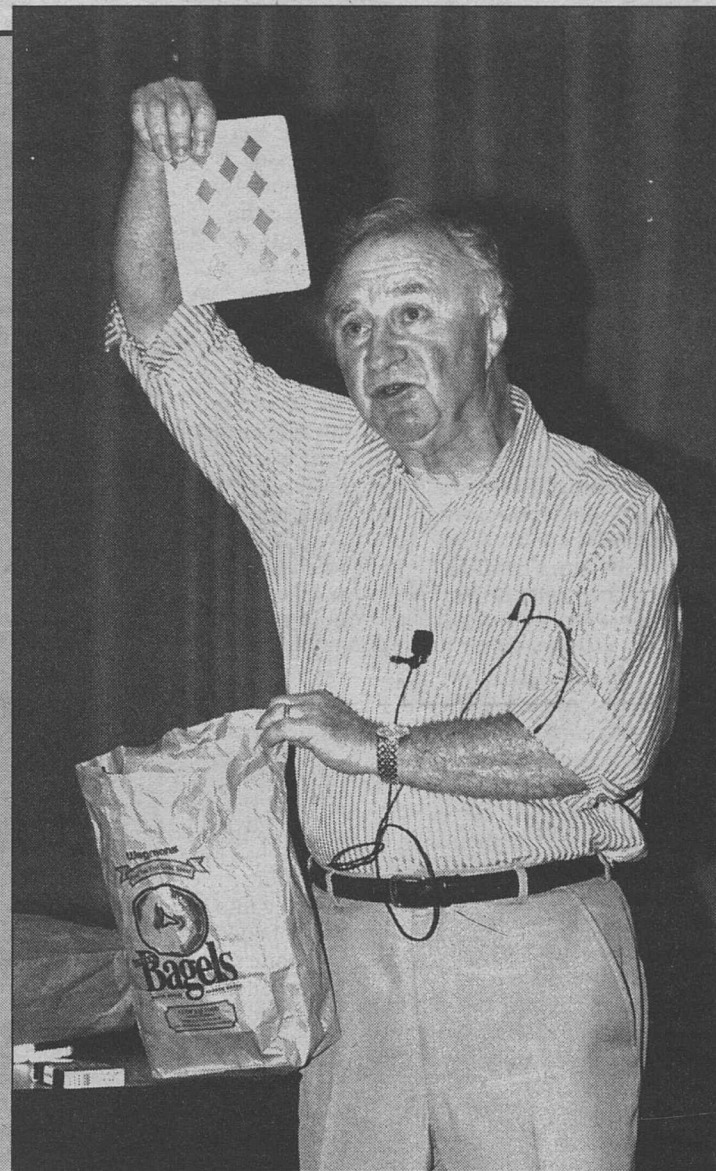
"So we can type *H. pylori* strains from different societies by differences in their DNA," Berg

said. "One of the most striking differences was between strains from eastern Asia — China and Japan — and strains from Amerindians in Peru."

Berg speculates that *H. pylori* might have infected humans when agriculture brought animals and people into closer contact. "Many other diseases — tuberculosis, whooping cough, measles, mumps and chicken pox — are of animal origin and probably came into the human population when our ancestors started to practice agriculture and when their population densities increased," he said.

Until now, scientists have assumed that humans acquired *H. pylori* during their evolution from pre-human ancestors. "People haven't paid any attention to the possibility that human *H. pylori* infection might have become widespread only in more recent history," Berg said.

His results are compatible with the idea that genetic differences between strains in different parts of the world reflect selection for different types of CagA protein in different animal hosts — either domesticated animals or rodent pests that came to live with early agriculturists. "For example, the ancestors of European strains of *H. pylori* might have come from mice or sheep, whereas the ancestors of various Asian strains might have come from cats, pigs or Mongolian gerbils," he said. "All of these animals can be infected with at least certain *H. pylori* strains recovered from human patients."



Presto! Barry Steiger, M.D., a 1960 alumnus, shows off his magic skills at the "Docs Off-Duty" program during this year's Medical Alumni Reunion. The May 12 showcase, which also featured a pianist, an artist and an environmentalist, was held in the Eric P. Newman Education Center.



The new Heart Care Institute, which provides outpatient services, is located at 1020 N. Mason Road.

University, Barnes-Jewish open Heart Care Institute

The School of Medicine and Barnes-Jewish Hospital have opened the Heart Care Institute to make it easier for West County residents to access a full spectrum of nationally recognized heart services in one setting.

The institute, which provides outpatient cardiology services, is located in a new medical office building at 1020 N. Mason Road, just south of Olive Boulevard. Because of the institute, heart disease prevention, detection, rehabilitation and clinical investigation are more accessible than ever, said cardiologist Craig K. Reiss, M.D., associate professor of medicine and medical director of the institute, adding that the institute is supplementing services currently offered at Barnes-Jewish Hospital.

Among these services are full-service diagnostic testing; thallium stress testing and diagnostic catheterization; subspecialty consultations for congestive heart failure, hypertension management, coronary artery disease and chest pain; and management of valvular heart

disease, arrhythmia and cardiomyopathy.

Cardiac rehabilitation also is offered, including a gym designed exclusively for cardiac patients with telemetry monitoring, an indoor track and treadmills. The institute, which has a strong focus on prevention and wellness, features an auditorium for community lectures, a kitchen for heart-healthy cooking demonstrations and a patient library with on-line resources and customized software.

Jason Gottlieb, executive director, said the institute facilitates a close working relationship with referring physicians and promotes the quick return of patients to referring physicians. "The Heart Care Institute is the first non-hospital site in St. Louis to encompass cardiac wellness, prevention, detection, diagnostics, rehabilitation and clinical investigation under one roof," he said.

The following Washington University cardiologists will be based primarily at the Heart Care Institute: Reiss; Alan N. Weiss, M.D., professor of medicine;

Scott M. Nordlicht, M.D., professor of medicine; Keith Mankowitz, M.D., assistant professor of medicine; Charles F. Carey, M.D., assistant professor of medicine; and Mark S. Weinfeld, M.D., assistant professor of medicine. Victor G. Davila-Roman, M.D., associate professor of anesthesiology and of medicine; John M. Lasala, M.D., Ph.D., associate professor of medicine; and Ali A. Ehsani, M.D., professor of medicine, also will see patients there.

All the physicians will continue to have offices and see patients at Washington University Medical Center. Patients requiring complex cardiac diagnostic procedures or cardiac surgery will be admitted at Barnes-Jewish Hospital. "The physicians will work with clinical nurse specialists, cardiovascular technicians, exercise physiologists, dietitians and social workers to provide patients with a compassionate team approach to care," Gottlieb said.

Student to attend Nobel laureates meeting

By LINDA SAGE

The U.S. Department of Energy (DOE) has selected Yiing Lin, an M.D./Ph.D. student at the School of Medicine, to spend a week with 66 Nobel prize winners. DOE is sponsoring 36 American graduate students in biology, physics and chemistry to attend the 50th anniversary meeting of Nobel laureates June 26-30 in Lindau, Germany.

Since 1951, laureates in chemistry, physics, and physiology or medicine have met in Lindau to discuss important issues in their fields with students from around the world. This year, some 600 students from Europe, Africa, Asia and North America will hear lectures and participate in daily small-group discussions.

Lin will be the only participant from Missouri. He is doing his doctoral research in the laboratory of Gary D. Stormo, Ph.D., professor of genetics. The group is

developing new tools for classifying the working parts of genomes — the DNA instructions for building an organism. The main focus is on regions called promoters, which regulate gene activity and therefore protein production. Through statistical analysis, Lin aims to determine the structure of some known regulatory sequences to obtain key information for recognizing unknown promoters in genomes. This approach also might produce new tools for fine-tuning gene expression.

"Yiing has been in my lab for only eight months, but he has quickly advanced our project, improving on the techniques we were using and moving in some new directions," Stormo said. "His combined M.D. and Ph.D. degrees and his expertise in computational methods will make him a rare scientist with unlimited potential for biomedical research in the coming years."

Employees can sign final beam of care center

Through Monday, May 22, Washington University Medical Center faculty, staff and students are invited to sign the last steel beam of the Ambulatory Care Center before it is lifted into place. The topping out beam is displayed near the covered walkway and construction site near Parkview Place.

At 11:30 a.m. Wednesday, May 24, the three final steel beams of the center, which also houses The Alvin J. Siteman Cancer Center, will be set in place. Medical school employees and students are invited to watch the topping out from Euclid Avenue, south of the construction site.

When the three final steel beams are set, construction of the center will be 40 percent complete, said Dave Gough, project manager for J. S. Alberici. The

new building has 6,500 structural steel beams, which took 60 ironworkers 75,000 work hours to construct.

The expected completion date of the facility is November 2001.

Medical school to host book fair

The School of Medicine is hosting a book fair from 10 a.m. to 3 p.m. May 31 through June 2 on the second floor link of the Clinical Sciences Research Building. New York Times' bestsellers, cookbooks, children's books and more will be discounted 30 percent to 75 percent. Proceeds support the annual central administration picnic. For more information, call 286-0073.

University Events

Plant Science • Protozoa • Alzheimer's • Staff Day • Writers Institute

Posters

Student designers help mentally ill

— from page 1

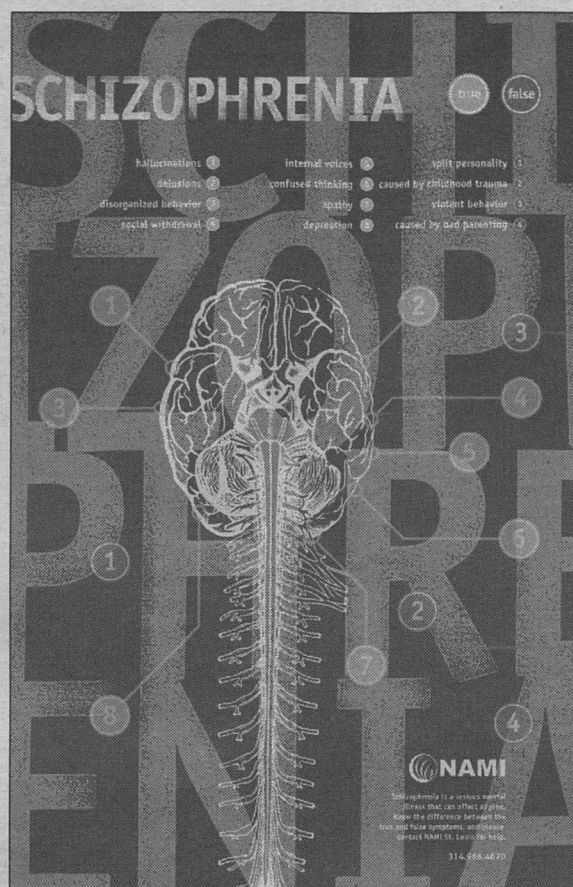
from schizophrenia. "We talked about the stigma and misconceptions — that people are violent, that it's one's own fault, that it stems from a weakness of character or poor parenting. Those things are no more true for severe mental illness than they are for heart disease or any other medical condition. The reality is that mental illness is not a hopeless condition."

Spurr said the assignment "was to use text and image together to convey a social message, which presented the students with some really complex problems. Over four weeks they had to generate their topic, research it, write their own copy, create the illustrations and art direct the whole piece. The one thing they couldn't do," she added, "was just scan some stock photo and stick a headline over it."

The posters fall into two general categories: teaching and advocacy. The first group examines the reality of mental illness, from basic information about the five main types (bipolar disorders, depression, obsessive/compulsive disorders, anxiety disorders and schizophrenia) to symptoms and statistics. The second group addresses topics surrounding the treatment of people who suffer from mental illness, from popular misconceptions to issues like the need for improved insurance coverage to simply promoting the NAMI name so that families know where to turn for help.

"We were impressed at how open-minded the students were," Stevenson concluded. "We were also very impressed with the quality, the clarity and the attractiveness of their work. Posters are out there to gain the attention of an audience and perhaps to teach them something, and I certainly feel they accomplished that."

Founded in 1978, the Alliance for the Mentally Ill—NAMI of St. Louis serves about 1,500 individuals in the greater St. Louis region. The group's mission is to improve the quality of life for people recovering from mental illness by providing family support and education; advocating for improvement in mental health-care delivery; and supporting research into psychiatric illness. Nationally, NAMI serves some 210,000 members through 1,500 affiliate organizations. For more information about their programs, call 966-4670.



Thirty-eight posters by juniors in the School of Art's Visual Communications Area went on display earlier this week at Westfield Shoppingtown Crestwood to help mark National Mental Health Awareness Month. The show runs May 15-29 in the Famous-Barr Concourse. Among the posters is one dealing with the facts and the myths of schizophrenia (above) by Andrew Miller.

grams, call 966-4670.

Frank Oros, assistant professor of advertising and design, helped students edit copy, and Joe Aerne, lecturer in visual communications, assisted teaching the class.

For more information about the exhibit, call 935-8402.

"University Events" lists a portion of the activities taking place at Washington University May 18-June 15. Visit the Web for expanded calendars for the School of Medicine (medschool.wustl.edu/events/) and the Hilltop Campus (www.wustl.edu/thisweek/thisweek.html).

Exhibitions

"Eyewash: A 25¢ Peep Show." Through May 21. Works by senior School of Art sculpture students. Lemp Brewery, 3500 Lemp Ave., St. Louis. 935-6500.

Bachelor of Fine Arts: School of Art Undergraduate Show. Through May 19. Gallery of Art. 935-6500.

Architecture's Design Awards Graduation Exhibit. Through May 20. Givens Hall. 935-6200.

"The Octagon Waltz (1995-2000)." Through May. Special Collections, fifth floor, Olin Library. 935-5495.

Lectures

Thursday, May 18

Noon. Danforth Plant Science Center seminar. "Protein Interactions in Structural Genomics." Ilya A. Vakser, asst. prof. of cell and molecular pharmacology, Medical U. of N.C., Charleston, S.C. Erlanger Aud., McDonnell Medical Sciences Bldg. 812-8056.

Noon-1 p.m. Genetics lecture. "C. Elegans Cell Cycle Transitions: Regulation by Multiple Degradation Pathways." Edward Kipreos, genetics dept., U. of Ga. Room 823 McDonnell Medical Sciences Bldg. 362-7072.

4 p.m. Cardiovascular research seminar. "New Insights Into Diastolic Physiology and Function." Sándor J. Kovács, assoc. prof. of cell biology and physiology, of medicine and of biomedical engineering. Room 801 Clinical Sciences Research Bldg. 362-8901.

5 p.m. Vision Science Seminar Series. "The Role of Rb in G1 Phase and Beyond." J. William Harbour, instr. in cell biology and physiology and asst. prof. of ophthalmology and visual sciences. East Pavilion Aud., Barnes-Jewish Hospital Bldg. 362-5722.

Friday, May 19

9:15 a.m. Pediatric Grand Rounds. "Functional Brain Imaging of Human Memory." Randy L. Buckner, asst. prof. of anatomy and neurobiology, of radiology and of psychology. Clopton Aud., 4950 Children's Place. 454-6006.

Noon-1 p.m. Gastroenterology research conference. "Pathophysiology in Helicobacter Pylori Infection: Differences Between Japan and America." Takeshi Azuma, Fukui Medical U., Japan. Room 901 Clinical Sciences Research Bldg. 362-8951.

4 p.m. Biology's Varner Lecture. "Genes and Proteins Involved in Cellulose Synthesis in Plants." Deborah Delmer, prof. and chair of plant biology section, U. of Calif., Davis. Room 162 McDonnell Hall (reception following). 935-6860.

4 p.m. Hematology seminar. "The Copper Chaperones." Jonathan D. Gitlin, prof. of pathology and of pediatrics. Room 8841 Clinical Sciences Research Bldg. 362-8801.

4 p.m. Neuroscience seminar. "The Architecture of Active Zone Material and Its Role in Synaptic Transmission, As Revealed by Electron Tomography." U. J. McMahan, Stanford U. Room 928 McDonnell Medical Sciences Bldg. 362-7190.

7:30 p.m. St. Louis Astronomical Society panel discussion. "Putting Stars in Their Eyes." High school science teachers discuss how they introduce their students to the universe. Co-sponsored by earth and planetary sciences dept. Room 162 McDonnell Hall. 935-4614.

Monday, May 22

Noon. Lung biology conference. "Genetic Susceptibility to Chronic Virus-inducible Epithelial Cell Growth and Differentiation." Jeffrey Morton, graduate research asst. in pulmonary and critical care medicine div. Room 801 Clinical Sciences Research Bldg. 362-8983.

Noon-1 p.m. Molecular biology and pharmacology seminar. "A Cross-eyed View of Development." Tanya Wolff, asst. prof. of genetics. Room 3907 South Bldg. 362-2725.

4 p.m. Immunology Research Seminar Series. "The Ins and Outs of Antigen Processing." David H. Fremont, asst. prof. of pathology and of biochemistry

and molecular biophysics. Eric P. Newman Education Center. 362-2763.

Tuesday, May 23

Noon-1 p.m. Alzheimer's Disease Research Center seminar. "Mouse PDAPP — Is It AD?" Daniel W. McKeel Jr., assoc. prof. of pathology. East Pavilion Aud., Barnes-Jewish Hospital Bldg. 286-2881.

Wednesday, May 24

8 a.m. Obstetrics and Gynecology Grand Rounds. "Treatment of Thromboembolic Disorders in Pregnancy." Lakshmi Dundoo, chief resident in obstetrics and gynecology. Clopton Aud., 4950 Children's Place. 362-1016.

4 p.m. Anatomy & neurobiology's Robert J. Terry Lecture. "Genetically Encoded Indicators of Signal Transduction and Protein Interaction." Roger Tsien, prof. of pharmacology and of chemistry, U. of Calif., San Diego. Moore Aud., 660 S. Euclid Ave. 362-7043.

Thursday, May 25

4 p.m. Cardiovascular research seminar. "Cardiac Connexin45: A Pivotal Role in Arrhythmogenesis." Kathryn A. Yamada, asst. prof. of medicine. Room 801 Clinical Sciences Research Bldg. 362-8901.

5 p.m. Vision Science Seminar Series. "Cellular and Cytokine Responses During Recurrent Herpetic Keratitis in Mice." Patrick M. Stuart, research asst. prof. of ophthalmology and visual sciences. East Pavilion Aud., Barnes-Jewish Hospital Bldg. 362-5722.

Friday, May 26

9:15 a.m. Pediatric Grand Rounds. "Functional and Genomic Approaches to the Study of Virulence in Parasitic Protozoa." Steven M. Beverly, the Marvin A. Brennecke Prof. and head of molecular microbiology dept. Clopton Aud., 4950 Children's Place. 454-6006.

Tuesday, May 30

Noon-1 p.m. Alzheimer's Disease Research Center seminar. "CSF Biomarkers in Subjects with DAT." John G. Csernansky, the Gregory B. Couch Prof. of psychiatry and assoc. prof. of anatomy and neurobiology. East Pavilion Aud., Barnes-Jewish Hospital Bldg. 286-2881.

4 p.m. Anesthesiology research seminar. Friedrich C. Dalman, asst. prof. of anesthesiology. Room 5550 Clinical Sciences Research Bldg. 362-8560.

Wednesday, May 31

8 a.m. Obstetrics and Gynecology Grand Rounds. "Managing HSV in Obstetrics: What is Science Driven? What is Risk Management Driven?" Larry Corey, head of virology div., U. of Wash., and head of infectious disease program, Fred Hutchinson Cancer Research Center, Seattle. Clopton Aud., 4950 Children's Place. 362-1016.

Wednesday, June 7

7:30 a.m. Orthopaedic Surgery's Arthur H. Stein Memorial Lecture. "Iatrogenesis Imperfecta Profunda." Peter J. Stern, the Norman S. and Elizabeth C. A. Hill Prof. and chair of orthopaedic dept., U. of Cincinnati Medical Center. Scarpellino Aud., first floor, 510 S. Kingshighway Blvd. 747-2562.

And more...

Monday, May 22

10:30 a.m. Staff Day. Service award presentations, lunch and afternoon activities. Register in advance for golf; golf cost: \$17. 935-5990.

Monday, June 12

9:30 a.m. — 12:15 p.m. Summer Writers Institute workshop. Various instructors in fiction, poetry and nonfiction (continuing each weekday through June 23). Cost: \$600. For application or information, call 935-6759.

2 p.m. Summer Writers Institute address. William H. Gass, the David May Distinguished University Prof. in the Humanities, prof. of philosophy and dir. of the International Writers Center, Duncker Hall. 935-6759.

Wednesday, June 14

1:30 — 2:30 p.m. Summer Writers Institute poetry reading/craft talk. Donald Finkel, author and former prof. of English and poet in residence. Duncker Hall. 935-6759.

Commencement Week

For more information, call the Commencement Hotline at 935-4355.

Thursday, May 18

11 a.m. Eliot Honors Convocation. Honoring students for academic and leadership achievements. Field House, Athletic Complex.

1:30 p.m. School of Engineering and Applied Science Recognition Ceremony in Field House, Athletic Complex. Reception follows in Lopata Gallery and Lopata Plaza between Jolley and Cupples II halls.

4:30 p.m. College of Arts & Sciences Recognition Ceremony in Field House, Athletic Complex.

5 p.m. School of Medicine Reception in Olin Hall Student Center.

8 p.m. School of Art Recognition Ceremony in Graham Chapel.

Friday, May 19

8 a.m. Degree candidates assemble.

8:30 a.m. Commencement Exercises in Brookings Quadrangle.

The following programs begin immediately following the Commencement Exercises:

College of Arts & Sciences: Reception and diploma distribution in the Sally E. Strain Courtyard, between Monsanto Laboratory and the Psychology Building. Rain location: Francis Gym, Athletic Complex.

University College: Diploma distribution and reception in Women's Building Lounge.

Graduate School of Arts &

Sciences: Hooding and recognition ceremony in Edison Theatre. Reception follows in the Gallery and the Gargoyle, lower level, Mallinckrodt Center.

School of Architecture:

Diploma ceremony, front lawn, Givens Hall. Reception follows in Givens Hall. Rain location and time: diploma ceremony in Graham Chapel, 3 p.m.

School of Art: Diploma distribution and reception on Steinberg Hall terrace. Rain location: Gallery of Art, Steinberg Hall.

John M. Olin School of Business: Undergraduate diploma and awards ceremony in Field House, Athletic Complex. Reception follows in Simon Hall.

School of Engineering and Applied Science: Undergraduate diploma distribution in Room 324 Lopata Hall. Reception follows in Lopata Gallery and Lopata Plaza between Jolley and Cupples II halls.

George Warren Brown School of Social Work: Diploma ceremony in Graham Chapel. Reception follows in the Lucy and Stanley Lopata Courtyard, between Brown and Goldfarb halls.

Program in Occupational Therapy: Reception in Holmes Lounge. Diploma ceremony follows in Graham Chapel.

The following program begins at noon:

Health Administration

Program: Diploma ceremony in the Carl V. Moore Auditorium.

Reception follows in the M. Kenton King Faculty Center, The Bernard Becker Medical Library.

The following program begins at 12:30 p.m.:

School of Law: Diploma ceremony in Brookings Quadrangle. Rain location: Field House, Athletic Complex. Reception follows in Anheuser-Busch Hall.

The following program begins at 2 p.m.:

Sever Institute of Technology, Graduate Division of the School of Engineering and Applied Science: Hooding and recognition ceremony in Edison Theatre. Reception follows in Bowles Plaza. Rain location: the Gallery and the Gargoyle, lower level, Mallinckrodt Center.

The following programs begin at 3 p.m.:

John M. Olin School of Business: Graduate diploma and awards ceremony in Field House, Athletic Complex. Reception follows in Atrium, America's Center, downtown St. Louis.

School of Medicine: Senior Program in The Grand Ballroom, America's Center, downtown St. Louis. Reception follows in the America's Center Atrium.

Saturday, May 20

One Day Reunion. Alumni from the fifth through the 65th reunions gather for cocktail parties, a parade and dinner. Class of 2000 tent, Graham Chapel lawn (pre-registration required).

Gallery of Graduates

Fischer: a sensation on the court, in class and in the community

By DAVID MOESSNER

One of the traits that levitated basketball sensation Alia Fischer above mere-mortal status on the hardwood is the deft and deadly use of her left hand. Already graced with one gift — a you-can't-teach-height 6-foot-3-inch frame — the natural righty worked hard to hone left-handed maneuvers, ones that sent shots swishing around and over her grounded foes.

That ambidexterity again has proven to be helpful: she's needed both hands to haul away the hardware that's come her way.

Just in the last few weeks: a third straight NCAA Division III Player of the Year trophy, an award that had never gone to a non-senior until she won her first as a sophomore; the Jostens Trophy, recognizing the outstanding student-athlete in Division III basketball; the GTE Academic All-American of the Year Award for eminence in athletics, academics and community service; and, most recently, a coveted NCAA Postgraduate Scholarship.

It would stretch the metaphor too far, though, to say that Fischer has used those talented hands to carry the Bears to their three straight national championships. This is a program, after all, that had made two trips to the Final Four before Fischer set her size-11 sneakers on campus.

But she was the Bears' first transcendent player, the kind of supreme talent for whom All-America trophies get placed on the second shelf.

Nonetheless, Fischer's recruitment and Hilltop arrival were not overly heralded. "I'd love to tell you we rustled the bushes and searched and found her," said head coach Nancy Fahey, who has led the Bears to a 324-61 record in 14 seasons at the helm. "But it was

one of those cases where the school drew her to us first. Her mom did research looking for good schools and found us on the Internet. After that, we did our work."

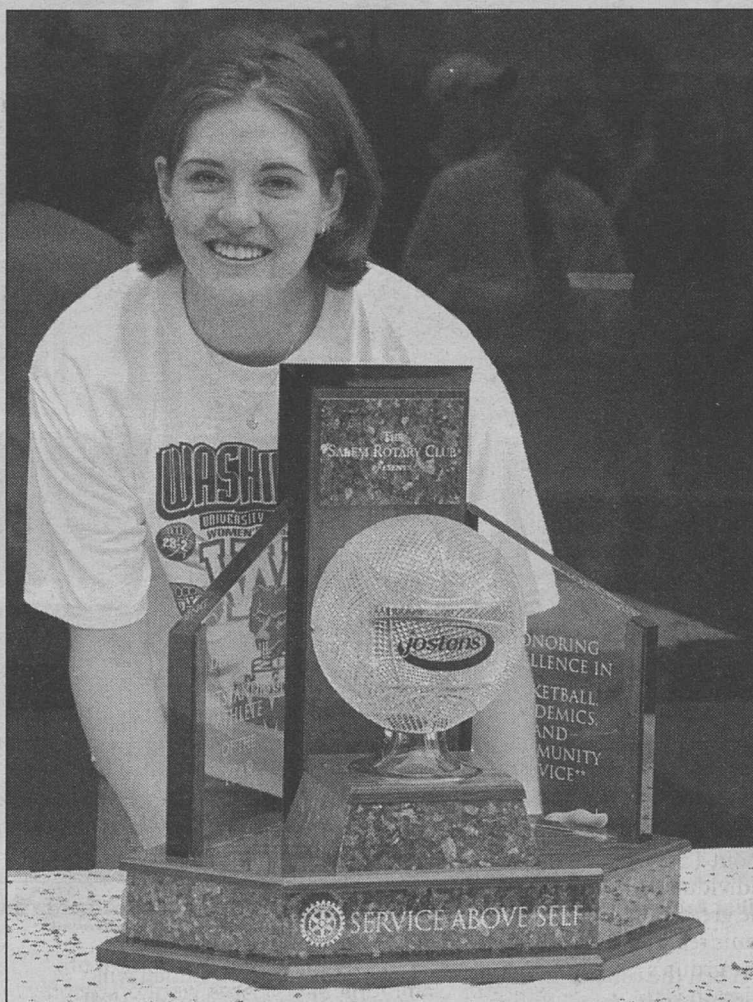
It didn't take long, though, to recognize the shine on their hidden gem — one who didn't take up basketball until the sixth grade and couldn't make her traveling team until eighth grade. "The first time she stepped on the court here, the first time I saw the left and right hand, I just had to step back," Fahey said. "At that moment, we knew."

The coaching staff's only initial difficulty was getting Fischer to assert herself. "I didn't want to come in and be a freshman ball-hog," Fischer recalled with a laugh. "The coaches wanted me to shoot more, but I wasn't necessarily comfortable with that. I looked and saw our four seniors and thought, 'This is their team.' I didn't want to intrude into what they had."

Countered Fahey: "You have to train someone who is unselfish to realize what's best for the team. We had to verbalize it in front of everybody so it didn't appear that Alia was taking it upon herself. Eventually she came to realize that it was okay for her to shoot."

The Bears finished 19-7 during her freshman year, getting bounced from the NCAA tournament in the first round. But Fischer's team-high 19-point performance in the tourney was a harbinger of things to come.

With Fischer leading the team in scoring and rebounding each of the next three seasons, the Red and Green posted marks of 28-2, 30-0 and 30-0 and claimed three straight national titles. Along the way, she shattered WU career records in points (1,974), rebounds (937) and blocked shots (219).



Among the many honors to come Alia Fischer's way was the Jostens Trophy, which goes to Division III's outstanding student-athlete.

"Human nature lets people become satisfied," Fahey said. "And Alia could have sat where she was and had a very nice, good career. But she was good and decided to be great. That's the package that is Alia, as a player and a person."

Humble to the core, Fischer will only allow herself to concede one personal attribute. "My work ethic, I guess," she said. "Coming out of high school, I don't think I had reached the peak of my game

at all. I still think if I continued on, there's a lot I could learn and develop."

Organized basketball is not in her immediate future. Although her interest in trying out for the WNBA was piqued by a strong all-star game performance last month against elite Division I talent, Fischer instead has decided to move to Boston and join the AmeriCorps program, a domestic version of the Peace Corps. She hopes to get paired with Habitat

for Humanity in the fall.

Hands-on work would be in step with her collegiate path, which concludes with a 3.84 grade point average in French and marketing. Fischer served as a member of Thurtene honorary, volunteered with Mentor St. Louis to help children at Clark Elementary School further develop confidence and independence, and supervised activities at Glenridge Childcare Center.

Fischer also interned last summer with the St. Louis Rams Foundation, the charitable arm of the professional football franchise. Perhaps it was the sight of her national championship rings that inspired the Rams to their subsequent Super Bowl heights?

"No, I didn't get a Super Bowl ring," she responded with a laugh. "I should have put that in my contract!"

The ultimate team leader — Fahey learned in her postseason meetings that Fischer was the teammate that most players went to for off-the-court guidance — Fischer is eyeing ways to assist from the bleachers. "I've already looked on the schedule for the Brandeis game in Boston. I'll be there for win number 88 in a row!" she said, referring to the plateau that would tie the Bears with the UCLA men's NCAA-record winning streak.

Next year's Bears have plenty of young talent eager to emerge, but Fischer has earned a permanent place in the history books.

"She's the composite of what a coach would want out of a player," Fahey concluded. "The natural ability, plus the refusal to stop. The one who keeps pushing, the one who dives on the floor, the one who is your warrior. The one others gravitate to. Coaches dream about a player like that. Boy, did we have one."

Miles Grier takes passion for words and ideas to teaching

By JEANNE ERDMANN

Miles Grier grew up in a house of words. His father encouraged him to read; his mother encouraged him to write. Their efforts produced a son with an intellectual passion for ideas, talent and text. It's no wonder that he chose English literature as his major. Over the past four years, Grier has distinguished himself as a scholar, jazz vocalist, journalist — and popular guy.

Born and raised in Cincinnati, Grier had never lived anywhere else until he came to Washington University during a weekend hosted by the Ervin Scholars program. He liked what he saw: Students were activists, friendly, studious and smart. That weekend, Grier noticed a student reading a book about Hip-Hop. "I thought, 'People write academic books about the history of Hip-Hop? This has got to be good,'" he recalled. Grier made his decision. "I had to come here — I felt very comfortable."

Once here, Grier sang in the vocal jazz ensemble for two years and the Black Composers Repertory chorus, as well as a campus jazz combo now called InsideOUT. He also sang gospel, classical and pop. Named for jazz great Miles Davis, Grier said his mother gave him the best advice about singing, which was: "Take a deep breath and do it." His father was more philosophical. "Keep the music with you," he said. "Music will be your friend when all others desert you." Grier took both pieces of advice to heart.

Grier believes his biggest accomplishment during his time here was directing the Black Anthology performance this year. "Black Anthology is student-run and student-directed," he said. "It's a collage of poems, short dramatic scenes, one act plays, songs and dances. Although I was assistant director in 1999, I had never directed before. Directing was a really different ballgame."

He and the other students chose the theme "Flip the Script: Dreams, Escapes, Revolutions." "The idea behind that theme," Grier explained, "is that each of us is handed a script in life that we are to follow, and even though that's the case and it's very limiting, there are always ways out. Those ways out are dreams, escapes and revolutions."

Grier, who likes to write in the condensed space of short fiction, wrote two monologues for the program. He also writes an opinion column for Student Life, and he most definitely has a theme for that endeavor — he examines whether the way we communicate enhances community or breaks it apart. He tackles the state of journalism on campus as well as the national media.

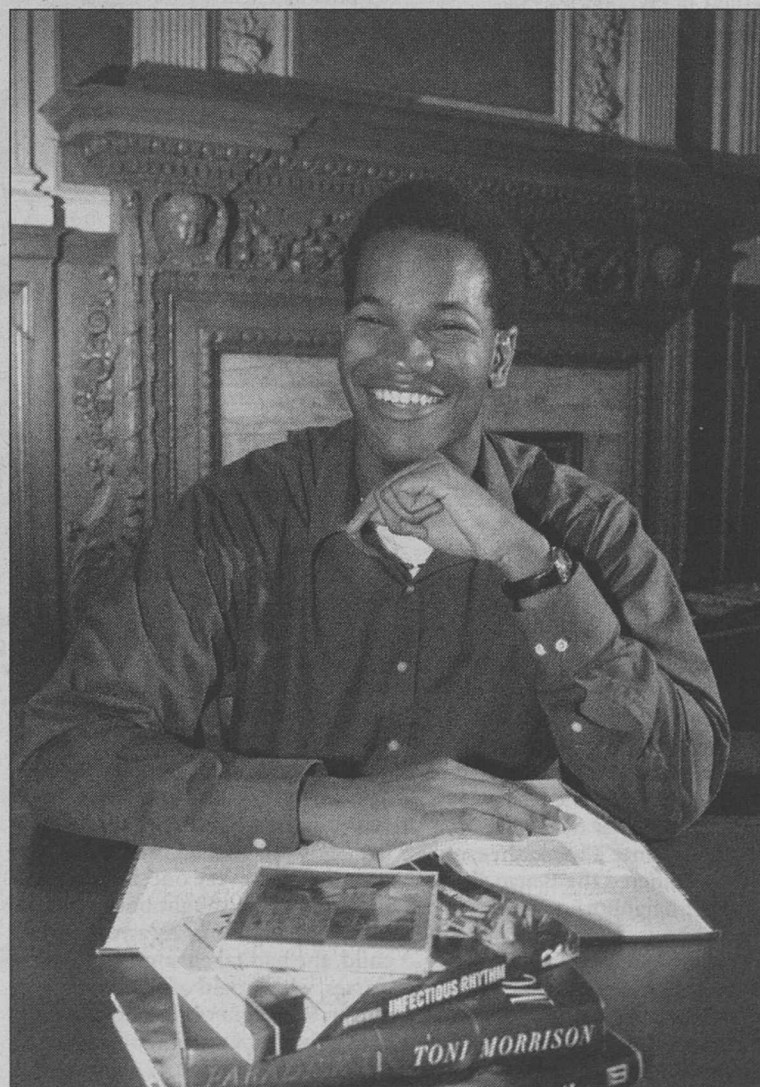
"It's the unconscious mistakes that reveal a lot about how people think," he observed. "Sometimes my friends say, 'Oh, Miles, does it always have to be about race?' And to that I say, 'If that's the example I'm given then that's the one I'll puncture. I always say it's an accuracy issue; it's a language issue. The manifestation might be something that is racially insensitive. But what hurts about it is

that someone is giving a very simplistic view of life and events, and when you start thinking about people as only criminals, or super heroes, or problems, that has real social and political consequences. As an opinion columnist, it's my responsibility to challenge those depictions and leave a fuller one in their place."

He grew up in a family that addressed social issues. His mother is a social worker, and his father is a photojournalist for the Cincinnati Post. Grier credits his parents for his sense of responsibility and indebtedness to other people. "As long as you're making a contribution to one community that gave to you," he asserted, "you're doing what you're supposed to be doing, because everyone owes someone something."

James E. McLeod, vice chancellor for students and dean of the College of Arts & Sciences, certainly believes that Grier has made a contribution to the University community. "I am an admirer of our students," McLeod said. "It's easy to do with Miles — he is a multi-talented individual with a finely tuned sense of quality and the process and habits it takes to get there. What I most admire is his deep commitment to teaching and his commitment to ideas that will stand out and endure over time, as well as make a tremendous difference."

Grier plans to teach English next year at Saint Louis University High School. This summer, meanwhile, he hopes to complete a play — his first — about Billie



Miles Grier, from Cincinnati, has distinguished himself on campus as a scholar, jazz vocalist and journalist.

Holiday. Mixing the worlds of teaching and performing will be difficult, but he will find a way. "If you think of teaching as a

kind of performance, and if you bring that kind of energy to the classroom," he said, "then every day is a great day."

Gallery of Graduates

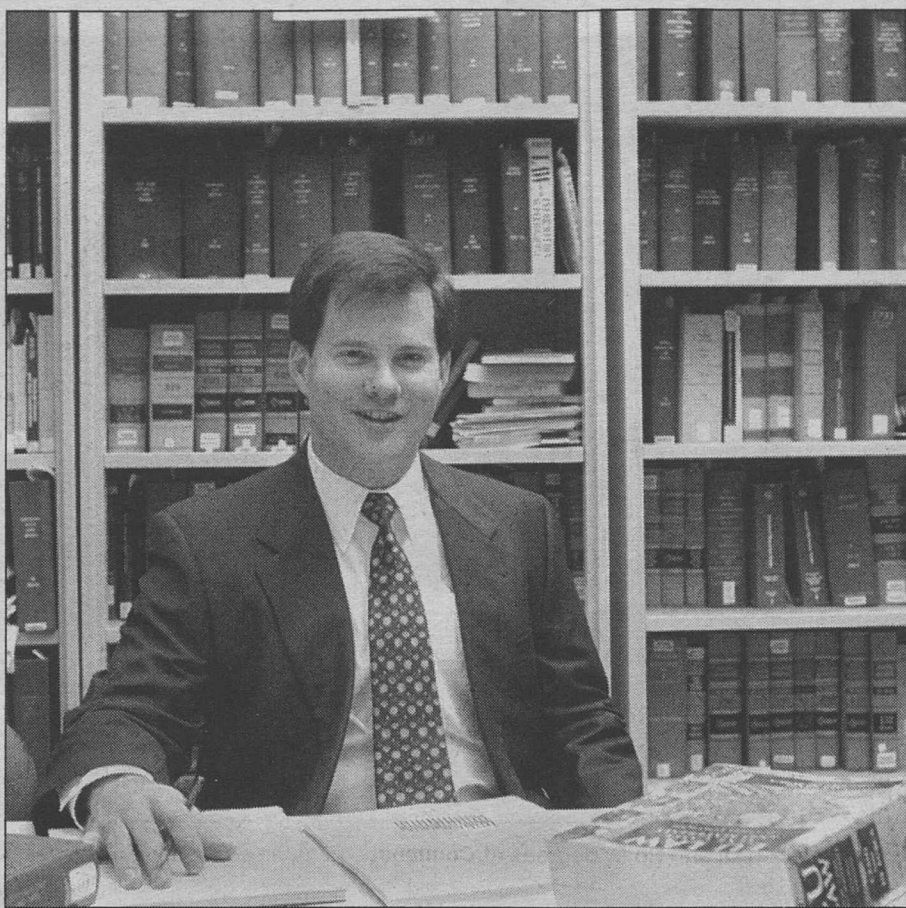
Andrew Ruben: world-class cellist, stand-out law student

BY JEANNE ERDMANN

In the hierarchical profession of law, Andrew Ruben already is ascending through the ranks. He is graduating high in his class. Wall Street law firms are courting him. So he looks forward to being an attorney — but the law will be his second successful career. He is a world-class cellist as well.

He chose music, he said, because he loved it and had a passion for it, even though he didn't have great natural gifts. "I learned how to be good at music," he observed. "It took a lot of effort." But with a mother who is a music educator and a father who shares Ruben's can-do attitude, he was bound to succeed. "Dad played the trumpet in the Naval Academy band, even though he was tone deaf," Ruben noted. "I asked him how he did that, and he said, 'Well, I just pushed down the right keys and managed to stay out of trouble.'"

Ruben certainly did succeed. A string quartet, formed when he was an undergraduate at the University of Michigan, Ann Arbor, developed into a professional chamber music ensemble that performed in more than 300 concerts across the United States, Europe and Australia. "We clawed our way up," he recalled. "It was a very exciting thing to do for a couple of years. We never won a top international competition, or I still might be doing it, but we'd place fifth or sixth in the world. That feels good, but it doesn't keep your career going."



Cellist Andrew Ruben looks forward to a promising second career in law.

When the time came to get another career going, Ruben chose the law because it was a known commodity. "My father was a nuclear engineer for the Navy who went to law school when he was 30," he said. "That's why I had no fear of changing careers."

This summer, Ruben will work as an associate in a Wall Street firm. In the fall, he will clerk for Deanell Reece Tacha, a judge on the 10th Circuit Court of Appeals in Lawrence, Kan. "She is an amazing woman, a wonderful mentor and a fantastic judge," he said. "I'm

extremely lucky to have gotten that position."

Ruben is the only student in his law class to land a clerkship on the Federal Court of Appeals. There are 150 federal appellate judges and 450 spots. "It's a difficult roll of the dice because most judges choose applicants connected to their alma mater," he explained. "Every year, Judge Tacha gives a clerkship to the top student at the University of Kansas and one to a student at Duke. I got the third spot." Ruben believes his achievements as a cellist allowed him to stand out over hundreds of equally qualified students.

He also will serve as an adjunct professor here to help coach students on the Phillip C. Jessup International Moot Court team. For this competition, law students all over the world analyze a problem of international law. In the United States, regional winners advance to the international round. In 25 years, Washington University had never won

in its region. But this Jessup team, on which Ruben was captain, has won two years in a row.

Ruben credits faculty adviser Leila Nadya Sadat, J.D., LL.M., D.E.A., professor of law, for bringing the team up to international standards. Sadat credits Ruben for serving as captain of a strong team. "Andrew is a fabulous student because he is disciplined and a perfectionist," Sadat said. "He took it upon himself to completely know the law. His knowledge and his organizational skills put the team in good standing. We've shown that our students are as good as students anywhere else in the world. The success of the Jessup team has been a shot in the arm for the law school."

Ruben also serves as executive articles editor of the Washington University Law Quarterly, a singular honor. Members of the quarterly are selected in a writing competition among students in the top 10 percent of the first-year class.

In the end, what most appeals to Ruben about the law is the variety of positions that eventually become available. "I am just excited to see if working in a large firm is something I can enjoy," he said. "If I really like it, I'll keep doing exactly the same thing." In the meantime, he plays the cello for enjoyment and occasionally gives recitals. Ruben might not know where the law will take him, but for now, he is enjoying the journey.

Jasenka Benac — from refugee to star engineering graduate

BY TONY FITZPATRICK

It's often said a good learning environment is a crucial factor in a person's success. Senior Jasenka Benac's parents — her father, Roman, a mechanical engineer, and her mother, Rasema, a chemical engineer — surrounded Jasenka and her younger sister, Sanja, with books and educational opportunities in their native Sarajevo, Bosnia.

It paid off. As an electrical engineering student here, Benac has made key contributions to a biomedical technology called brachytherapy and participated in work preliminary to NASA's search for life beyond our solar system.

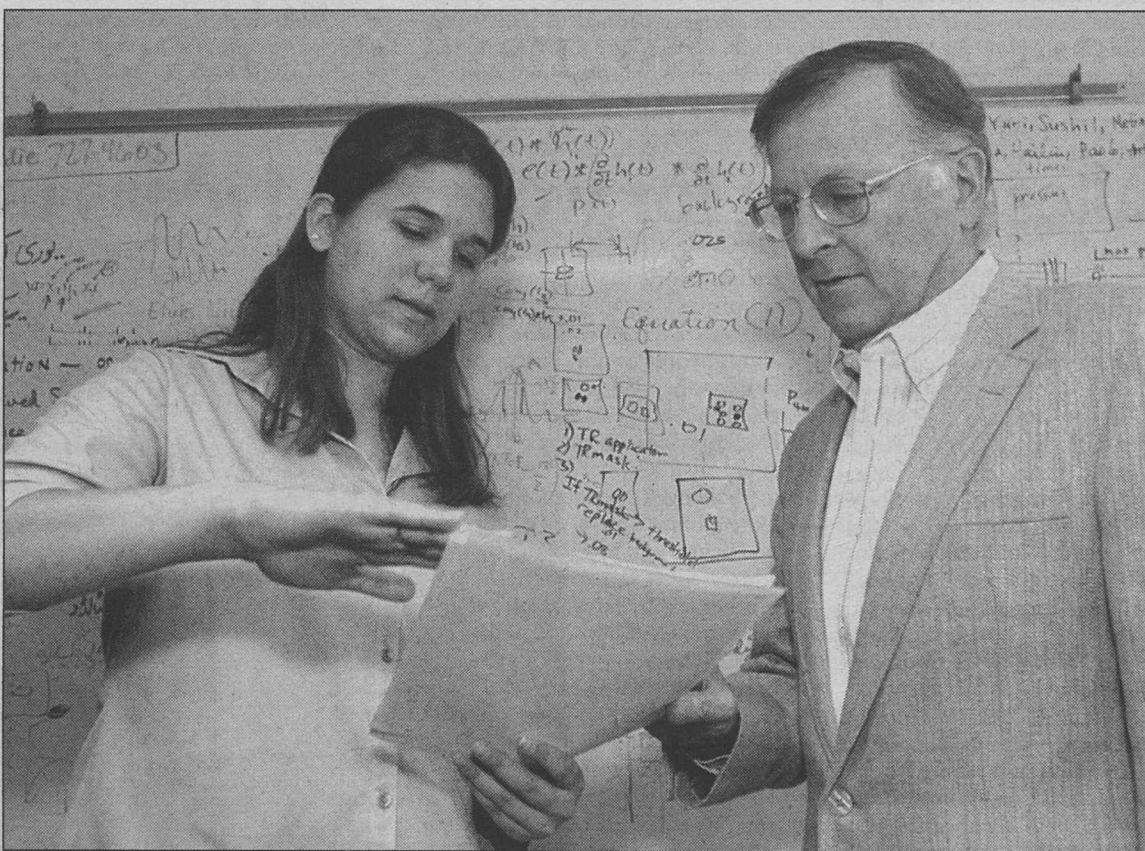
But the road she has traveled hasn't been easy.

War between Serbia and Bosnia broke out in April 1992. By 1994, when Serbia attacked Bosnia, Benac was a sophomore in high school, and her city was under siege; electricity and running water were cut off; bombs fell on her neighborhood, and sniper fire cracked through the streets. Food was scarce, meat almost nonexistent; most of life's necessities were bought on the black market. Her mother's company had shut down; her father remained employed for a company that paid him in cartons of cigarettes, which he bartered for food and other necessities.

Roughly once a week, their teachers gathered the Benac girls and other neighborhood students for a few hours in "safe" apartment basements, trying to keep the children learning.

"We lived like cave people at times," said Benac, who graduates this week with a bachelor of science degree. "Generally, we stayed very close to home. It was seldom safe on the streets. We kept our hopes that the war would be settled, but it got worse."

In this bleak environment, Benac kept her mind sharp. She



Jasenka Benac discusses an engineering design with her adviser, Donald L. Snyder, Ph.D., the Samuel C. Sachs Professor of Electrical Engineering. Benac, a graduating senior, overcame years of hardship in her native Bosnia before coming to St. Louis as a high school junior.

played cards and board games with neighborhood youths. Her parents had bought numerous sets of books to encourage their children to read, and though Benac mostly had ignored them, now she read every one, and when she ran out she sought books from the neighbors. As a younger child, she had taken some English classes, which paid off. She was able to stretch her knowledge of the language by reading some of the books in English.

"Kids are very resourceful," she said with a smile. "We made do with what we had, but the situation just never got any better."

Eventually, Benac's father arranged for her, her sister and mother to leave the country

through an agency in Zagreb, Croatia. They chose to come to this area through a family connection in suburban St. Louis. Roman Benac followed them a year and a half later.

Benac thrived at Rockwood Summit High School, absorbing American culture quickly and honing what she learned socially and academically by working part time at McDonald's. She picked Washington University over Saint Louis University "because of its strong reputation and engineering school," she said, staying in the area because she wanted to assist at home.

Benac chose electrical engineering, and by her junior

year she had grown interested in signals and systems as a specialty. Donald L. Snyder, Ph.D., the Samuel C. Sachs Professor of Electrical Engineering and a renowned imaging expert, became her adviser.

Snyder provided Benac the opportunity to become part of his research group, comprised of School of Medicine doctors and Hilltop electrical engineers working in brachytherapy, the biomedical technology involved in treating cervical cancer with ionizing radiation. She made important contributions to decreasing the blurring of images from CT scans, thus improving patient treatment.

In her last semester, Benac took

Electrical Engineering 480, an advanced undergraduate course taught by Snyder and William H. Smith, Ph.D., professor of earth and planetary sciences in Arts & Sciences. She was part of a team of 13 students who prepared a compact package of sophisticated imaging technology that will be incorporated into a canister placed within a National Aeronautics and Space Administration rocket's nose cone and launched from Wallops Island on Virginia's coast this June.

The mission is intended to develop methods for the search for life outside the solar system. The launch of the student rocket package is a first step into space for the imaging technology, called a Digital Array Scanned Interferometer, which Smith invented.

After the rocket launch, someone from the University needs to retrieve the package, and Benac has happily volunteered. "There will be no one left from the class, but I'll be here and I'd love to go," she said. "I can't wait to see the results."

Benac's professors praise her character and determination.

"Jasenka experienced many horrors of war and overcame difficult obstacles to achieve an outstanding academic record," Snyder said. "She has a wonderful, outgoing, positive personality and will contribute much to society as her career grows."

Benac loves the University's diversity and the rich opportunities to explore many educational and social options. She has been active in various leadership programs, the Society of Women Engineers, In-Town Students, Student Union and the Office of Student Activities.

Benac has been admitted into the engineering graduate school and has set her sights on a master's in electrical engineering. "That's my goal, to take one step at a time, learn all I can and enjoy the whole process," she said.

Gallery of Graduates

Minning loves research — 'There's always more I want to learn'

By DIANE DUKE WILLIAMS

As a child, Dena Minning, M.D., Ph.D., watched the first shuttle landing in Florida from the roof of mission control at Kennedy Space Center. Her stepfather, an engineer in charge of tracking and communication for shuttle launches, secured her the front-row seat. She credits him and a grandfather who did defense research with influencing her unfolding interest in science.

Announcing at age 7 that she was going to become a doctor, Minning was an extremely curious child with a knack for science and medicine. "I was always interested in biology and medicine and watched NOVA on television," she said. "Learning about the human body was so fascinating to me."

Today, she thinks being a physician/scientist is the perfect job for her. "I love being around people and know I couldn't be locked in a lab all day," she said. "But I also want research to be a major part of my career."

Minning, who grew up near Kennedy Space Center in a little beach community called Indialantic, discovered scientific research during her sophomore year at the University of Florida. Her organic chemistry professor asked if she'd like to do research with a hematologist. She then worked on independent projects in a hematology laboratory for two years.

"I was basically sold. I knew I loved research," she said. "I like the fact that when you answer one question, it might open up 50 more questions. It's very rarely a



Dena Minning, who will receive both M.D. and Ph.D. degrees at Commencement, enjoys a hike in Glacier National Park.

dead end."

Her curiosity has paid off. As a Ph.D. student, Minning has been first author on three articles, one in the journal *Nature* and two in the *Journal of Biological Chemistry*.

In the *Nature* paper, Minning discovered a novel function for hemoglobin in a parasitic worm called *Ascaris* while working with Daniel E. Goldberg, M.D., Ph.D., professor of medicine and a Howard Hughes Medical Institute assistant investigator. She found that the worm's hemoglobin functions as an enzyme instead of

as an oxygen transporter.

"Scientifically, her discovery was remarkable," Goldberg said. "She's extremely bright, energetic, enthusiastic and insightful."

Because of Goldberg's recommendation, Minning also served as the only trainee on an independent panel investigating gene therapy clinical trials at the University of Pennsylvania's Institute for Human Gene Therapy. William H. Danforth, M.D., Washington University chancellor emeritus and vice chairman of the Board of

Trustees, headed the panel.

Minning did research for Danforth and helped write up a report of the committee's findings.

Another of Minning's joys is teaching. She mentored many fellow students and was a teaching assistant for the medical school's hematology course for four years. Scot G. Hickman, M.D., associate professor of medicine and hematology coursemaster, said Minning quickly won the students' trust. "She was a great teacher because

of her enthusiasm for hematology and because of her enthusiasm to have the students understand the subject matter as well as she does," he said.

During school, she also found time to volunteer, providing health care to the homeless at a local shelter.

In her scarce free time, Minning hangs out with her two dogs, a bichon frise named Chelsea and a 50-pound mutt named Kate, and enjoys backpacking and hiking with her boyfriend, Mike. She also loves to travel, surf and sail, hobbies she plans to indulge more when she moves to San Francisco later this month.

She will be a resident in internal medicine at the University of California, San Francisco, and then intends to pursue a hematology fellowship. Although she has many years of training ahead, Minning doesn't seem to mind. "There's always more I want to learn," she said.

Timothy G. Buchman, M.D., Ph.D., the Harry Edison Professor of Surgery and professor of anesthesiology, supervised Minning during some of her clinical training. He said one of the joys of being on a great medical school's faculty is working with students as inquisitive as Minning. "Whether she is working on *Ascaris* hemoglobin or taking care of a patient on the ward, she simply wants to understand how it works, what goes wrong and what she can do about it," Buchman added. "My only regret is that I could not persuade her to become a surgeon. Our loss, but internal medicine's great gain!"

Worldwide travels shape Bognár's architectural designs

By ANN NICHOLSON

Whether rowing crew on St. Louis' Creve Coeur Lake, or sketching a shrine in Tokyo, or creating downtown apartment designs inspired by the flow of the Mississippi River, architecture major Balázs Bognár embraces each challenge with an inner focus and an irrepressible outer exuberance.

"My approaches to crew and architecture cross over to some extent," noted Bognár, a former captain of the University crew team and a graduating senior. "Both require concentration, hard work and a little bit of luck. There also is a similar satisfaction to rowing in synchronicity as part of the team and to seeing a little bit of yourself in a finished architectural design."

Bognár's father, Botond Bognár — an architecture professor at the University of Illinois at Urbana-Champaign and an expert in Japanese architecture — inspired his son's love of design and provided him with the opportunity to travel worldwide. In his sojourns throughout Europe, Japan, China, Hong Kong, the Philippines, Indonesia and the United States, Bognár has appreciated exposure to a variety of cultures and vastly different living conditions.

"I am indebted to my father," Bognár said. "He essentially has shown me the world and influenced the way I think about architecture. It has given me a more open mind and a larger frame of reference. My design vocabulary is informed by what I have seen."

From working as an intern for an architectural firm in the bustle of Tokyo to experiencing the

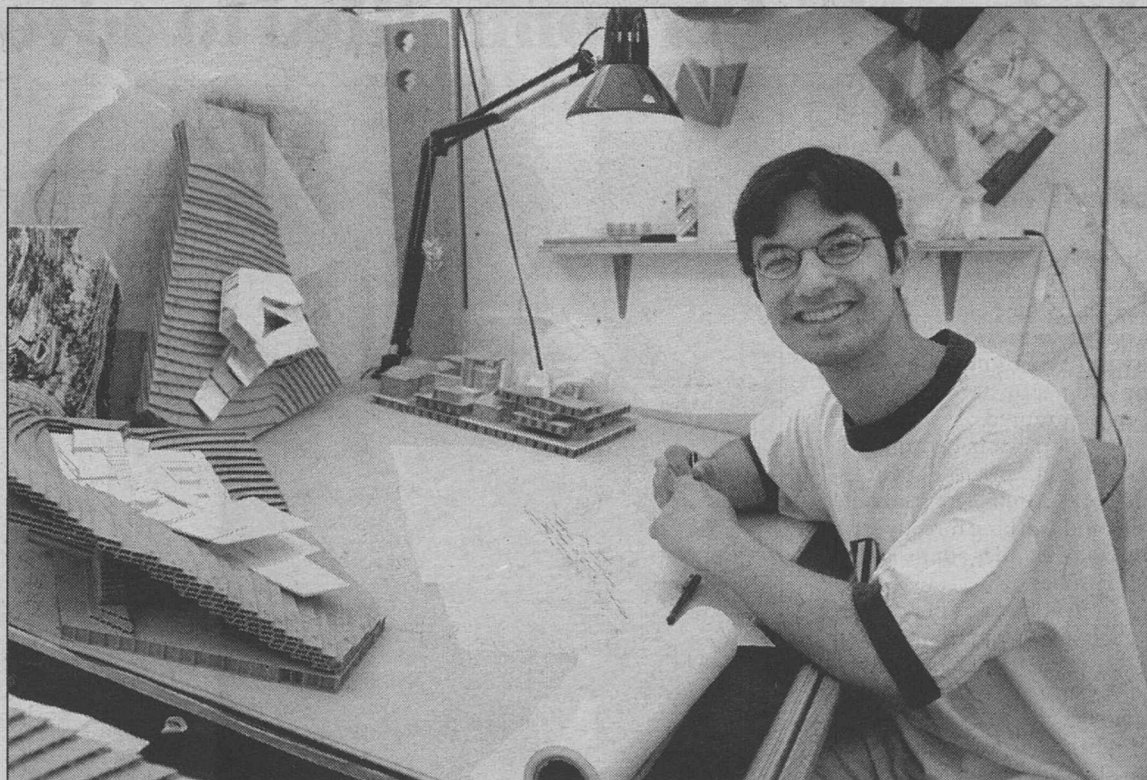
breathtaking surrealism of life among 500-foot high sand dunes in a small Mongolian desert town, Bognár finds observing other cultures and the role of architecture within those cultures awe-inspiring.

"Traveling gives you a sense of both how small and how large the world is," said Bognár, who is fluent in Hungarian and Japanese. "There is so much out there that is fascinating. Architecture is a small part of the equation, but when you observe how people interact with it, you begin to see how it plays a part in the bigger picture."

Bognár added that both his father and his mother, Concepcion Bognár, have contributed to his outlook. "My parents have taught me the importance of enjoying what you do," he said. "To be in love with life is my life-long goal. I hope I never lose that childlike sense of curiosity."

Architectural design has given Bognár, who has captured impressions of his travels through field sketches and photographs, a new outlet for his drawing and observation skills. "My drawing is no longer just an expression of the world around me but eventually means a built form that has a much greater presence," Bognár said.

Architecture Professor Iain Fraser observed that Bognár's architectural drawings offer layers of meaning. "His sketches are beautiful and intelligent," Fraser said. "They display a fine awareness of the subtle nuances of surface and light, form and space, material and assembly. They also reveal a sophisticated sense of reinterpretation: he internalizes and 'similarizes' very different



Architecture major Balázs Bognár, who has a passion for drawing, says he can remember his first sketch at age 2 — of his teddy bear. Bognár has since fine-tuned this skill and now applies it masterfully to architectural design.

works of architecture through the 'eye' of his personal and well developed graphic technique."

In the studio — where Bognár experiments with the role of design as it relates to site, climate, culture, materials and use — he enjoys the process as much as the end result. "Each time I approach a project, I try to remove any preconceived notions and infuse creativity and imagination," Bognár said. "It is a learning and an uncovering process. Many times, I don't know where it will end up."

Discussing ideas with his professors and fellow students is an important step. "They help me to see things in new ways," Bognár

said. "I then clarify my ideas and tighten the project with the hope of designing something that is exciting to experience and good for the users."

Bognár's dedication and professional promise as a designer have pervaded his four years here. He entered the undergraduate program on a full-tuition scholarship as a James Walter Fitzgibbon Scholar and recently was named a regional finalist in the Rhodes Scholar program. Last month, Bognár received two other high profile distinctions. He earned the school's Faculty Award, given to an outstanding graduating senior, and the Frederick Widmann Prize, based

on a winning exhibit of his architectural work. In the latter, faculty members selected 10 nominees from both the graduate and undergraduate program to compete.

As for the future, Bognár has been accepted at Harvard Graduate School of Design, where he plans to pursue a master's degree in architecture with the goal of becoming a designer and professor of architecture. "From a very early age, I knew I would find myself pursuing architectural design," he said. "I can't envision anything else. I'm ready to take things to the next level."

Gallery of Graduates

Like magic, Rothmel comes up with thriving business ventures

By NANCY BELT

Take a child mesmerized by magic, a high schooler who created his own magic entertainment business, a college freshman who co-founded and co-owned a company providing Web pages and custom software, a junior whose team won first place among undergraduates in the Hatchery entrepreneurship program, and a senior who is co-partner in an online venture serving prospective and current college students — put them all together, and *voilà*, you have Joshua "Josh" Rothmel.

In the breadth, depth and quality of his ideas, he's as impressive as he was in his favorite stage illusion — appearing from an empty box. "He always has interesting ideas," said friend Heather Harris, BSBA '00, fellow student at the John M. Olin School of Business and a teammate in the school's Hatchery competition. "He thinks outside the box."

"He's also a good leader," Harris said. "He really motivates people. He could step right into a managerial position. I can see him working at a dot-com and taking it public." Harris said the two became friends their freshman year, when they lived in Rubelmann Residence Hall and discovered their mutual interest in business. "It was great to find somebody else who shared my interests," she said, "and, since I was from New York and he was from St. Louis, he helped me get acclimated here."

Last year, the two were part of a team in the Hatchery entrepreneurship program. Rothmel spearheaded the team, and Harris, an accounting and finance major, handled the financial analysis. The

team created a business plan for FreeView, Rothmel's idea to computerize ads shown in movie theaters, customizing them to each movie's likely audience. Their team's plan won first place of the six teams in the undergraduate division.

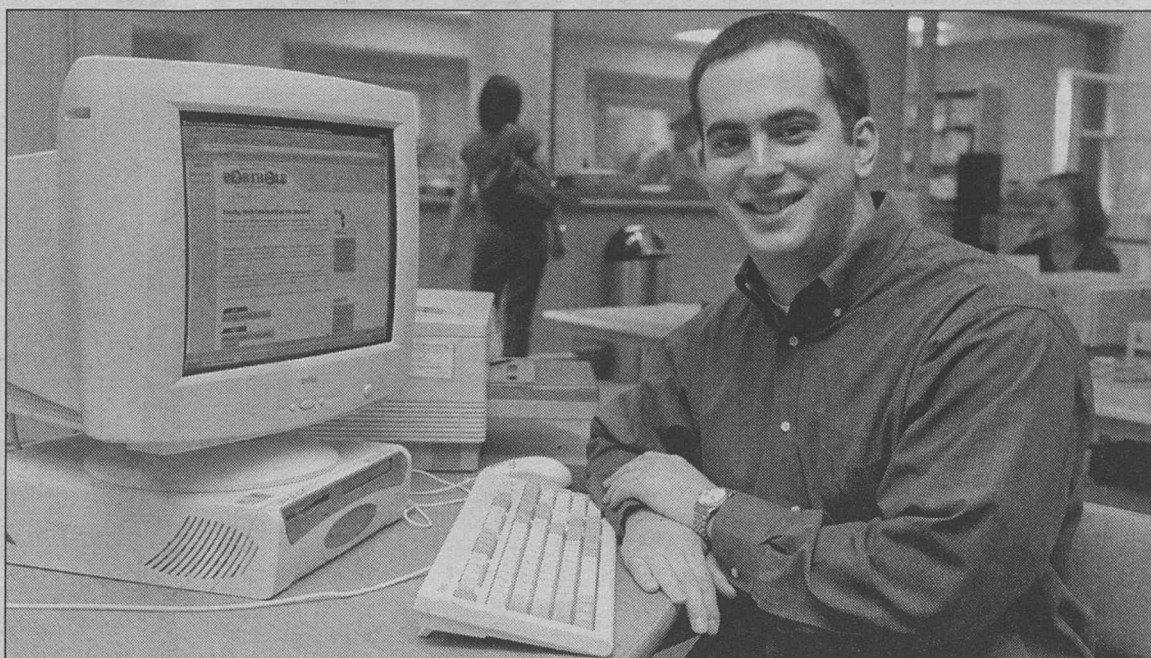
Rothmel, who developed outstanding graphics for the presentation, long has shown interest and ability in the visual dimension, whether in magic acts, as editor of his high school newspaper or as co-owner and founder of a Web page and software design company, Innovative Business Technologies, during his freshman year at the University. He and his roommate successfully marketed the company's services to mid-sized businesses, mainly in manufacturing, until the company ended operation in 1998.

He also used his creative visual talent to design and lay out the Ternion, the University's official phone directory, as one of 14 juniors in Chimes, the junior honorary.

The latest venture for Rothmel and another partner is Porthole, an online portal to life at universities, allowing incoming freshmen to exchange information with current students so that they get to know the campus and some students before they begin their first semester. The site also allows university student groups, whether formal or informal, to share files, pictures, addresses and messages.

"We created Porthole for fun, because it allowed us to experiment with new technology and programming, and we do hope to sell our product to other universities," said Rothmel.

Carrie Heilman, Ph.D., assistant professor of marketing at



Like rabbits from a magician's hat, creative business ideas come tumbling out of Josh Rothmel's entrepreneurial imagination.

the Olin School, has enjoyed getting to know Rothmel as a student in her Principles of Marketing course, then as her teaching assistant for it. She also has overseen his two independent study projects, FreeView and Porthole. "Josh is an extremely hard worker, and he initiates the work," she said. "His work ethic shows through, and he's very conscientious, paying attention to details."

Rothmel also has shown strong leadership ability as president of the University's chapter of the American Marketing Association. "He has overseen operations, established the chapter's constitution and dealt very maturely with business executives on the board," Heilman said. In addition, as president of Delta Sigma Pi, the professional business fraternity,

Rothmel has directed operations of the 85-member chapter.

"I'm not the biggest fan of schoolwork, but I've learned a lot here," he said, "especially in management, competitive strategy and the Hatchery, which is the best preparation for the real world. I hope to learn a lot more that will help me become an entrepreneur."

Rothmel already has considerable work and community service experience. While in high school, through Magic Josh and Company, he and his troupe provided magic shows at Kirkwood (Mo.) Community Center to raise funds for St. Louis Food Pantry and the Salvation Army. He also worked at Camp Ramot Amoonia in St. Louis, and, in 1998, was an assistant camp director, helping to manage a staff of 50. He has been

an intern in marketing and research for Sinclair Broadcasting Co. and a brand development intern for Clayton Corp./Convenience Products in St. Louis.

After graduation, he will begin work at Hewitt Associates in Chicago, a benefits consulting firm. Rothmel, who grew up in the St. Louis area, where his mother is planning director for the city of Town & Country and his father is a sales specialist for Bayer Pharmaceuticals, said he's looking forward to living in Chicago. "I'm ready to explore someplace new," he said.

Whatever Rothmel explores, his success will be not a grand illusion, but rather the well-earned fruit of solid talent, hard work and the enthusiastic pursuit of varied experiences — altogether a magical act.

Barbara Weber committed to advocacy for terminally ill

By GERRY EVERDING

College graduation ceremonies, by their very essence, are inevitably a time when young people look ahead toward long promising careers and rich personal lives. Perhaps more so than her fellow graduates, master of social work student Barbara Weber knows that a long and happy life cannot be taken for granted.

As a specialist in gerontological social work, she spent much of her time here studying about and working directly with terminally ill older adults and their families.

"The whole reality of not being here tomorrow is much more real for them than it is for any of us," said Weber, a St. Louis native who started her college education at age 33. "When I tell people that I work with older adults dying of cancer, they say it sounds so depressing, but my experience has been just the opposite."

"The people I've come to know through this work have inspired me. They've helped me understand the importance of living for today, and they've made me very thankful for everything I have."

Weber plans to pursue a career in hospice care for older adults, but her career path has not always been so well defined. After high school, she spent years working in "making ends meet" jobs in the restaurant, banking and graphics industries. She'd always been interested in social work, but never thought of college as an option. That all changed when her own grandmother fell seriously ill just before her 99th birthday.



Barbara Weber started college at age 33 and graduates this week with a master of social work degree.

"I felt the medical profession treated my grandmother very badly," Weber said. "The whole experience made me that much more determined to get a degree and somehow work to make people's lives better."

Weber enrolled in a special

five-year academic arrangement that allowed her to earn a bachelor's in human services from nearby Fontbonne College and a master's in social work from Washington University's top-rated George Warren Brown School of Social Work.

Weber earned her bachelor's from Fontbonne in 1999 and will be one of the nearly 150 students receiving a master of social work degree from Washington University Friday, May 19.

During her two years here, she has gained firsthand experience through two practicum field projects with St. Louis-based health care providers. In early 1999, she spent six months working as part of an interdisciplinary health care team at Deaconess Hospital (now known as Forest Park Hospital). As a social worker, her contribution involved assessing the needs of cancer patients and their families, providing emotional support and arranging nursing assistance or hospice placement as necessary.

Since August 1999, she has interned with American Heartland Hospice, where she provided similar counseling services to older adults in their final months, weeks and days of life. Weber took on her own caseload of patients, performing initial assessment interviews, developing care plans and making follow-up visits to help patients and families adjust to major lifestyle changes. She also co-led two bereavement support groups.

In March, she spent a week in London observing members of the interdisciplinary team at St. Christopher's Hospice, which is known as a leading model for innovative end-of-life health care and support. She returned to campus convinced that the British method of providing home, hospital and hospice care for the terminally ill is far superior to America's system.

"The British health care system does whatever possible to keep terminally ill patients in their own homes as long as possible, and it provides an incredible array of services that follow patients as failing health requires them to move from home to hospital to hospice," Weber said. "America's health care system makes it extremely difficult to get financial support for in-home care, and our doctors seem to consider putting a patient in hospice care as an admission of defeat."

Weber would like America to move toward a system that provides the terminally ill with a much broader and more seamless continuum of care, one that would begin providing services long before the final months of life.

"Right now, most of the American patients who make it into hospice care are only there for the last few weeks of their lives, and the primary service they receive is pain management," Weber said. "Those who stay in their homes have difficulty getting the help they need because the current health care system does not effectively support the services of disciplines such as social work."

Weber would like to take an active role in lobbying for policy changes to help terminally ill older adults get the services and programs they need to live out their lives with dignity.

"Older adults deserve so much more respect than our society currently gives them," Weber said. "I know we can do better, and I'm thrilled that I now have the education and experience to make a real contribution to the effort."

Gallery of Graduates

Jean Kersting has zest for life, travel, politics, community

By Christine Farmer

Jean A. Kersting credits a new geography book in the fourth grade with sparking her passion for international studies and travel.

"This book wasn't just the typical dry statistics about topography. It was about kids my own age and what they did all day," she said. "I thought, 'I want to go there and play with them.' I was fascinated by it."

In the last decade, she has not only been to places she once dreamed of visiting, she also has studied them in depth at the University while earning a bachelor's degree in anthropology through University College, the evening division of Arts & Sciences, and, this week, a master's in the International Affairs program, sponsored jointly by University College and the Graduate School of Arts & Sciences.

She traveled to East Jerusalem, the West Bank and the Gaza Strip to assess medical facilities' conditions as a delegate for the Palestine Aid Society in 1994; served as an international election observer in Chiapas, Mexico, in 1997; and last summer she participated in the Center for Global Education program in Cuba, studying economic and political changes there since the collapse of the Soviet Union.

"I like to go to places where you can stay with families and see how life really is," she said. "I went to Guatemala in 1995 for fun and also to see how Guatemala was recovering from a prolonged civil war. To go to places I study about has given me a better sense of reality. Political decisions and changes effect people in their daily

lives. Most political texts only convey what it means in the grand scheme of things and not on a smaller scale. I like to go where political change is happening. I still want to go to Peru, Syria and Lebanon."

Kersting said she would like to go back to the Gaza Strip, where she spent time in refugee camps, to see if things have improved.

"The infrastructure was just destroyed, and I remember how excited they were about a jewelry store opening — something we take for granted — because they hadn't had one in eight years, since no one could afford jewelry," she recalled.

Her time in Mexico during the election made her realize that Americans who complain about politics do not realize how fortunate they are to have a functioning democracy.

While her husband, Charlie Rea, hasn't accompanied her on these trips (he has a different idea of a typical vacation, and it includes a hotel), he has been very supportive. He also has been understanding of her hectic schedule while she was attending school, serving as a community activist in Kirkwood and working full time at the insurance agency she owns with him.

After earning a bachelor's degree in 1996, she took a semester off before entering the graduate program, in which she focused on the Middle East. She speaks highly of her professors. "I took 'Western Social Thought' with Pedro C. Cavalcanti [Ph.D., adjunct professor of anthropology in Arts & Sciences], and he has a way of turning you upside down and shaking you and asking, 'Now what do you think?' He makes you



Jean Kersting, who is receiving a master's degree in the International Affairs program with an emphasis on the Middle East, enjoys local children in Gaza City in 1994.

question what you believe, and you walk away overwhelmed."

Of her adviser, Victor T. Le Vine, Ph.D., professor of political science in Arts & Sciences, she said: "I took two courses with him, one in Arab politics and the other in 'Terrorism and Terrorists.' I thought, 'How is he going to teach 16 weeks on terrorism?' — but it was incredible, very interesting," she said.

Just as she was impressed with Le Vine's teachings, he was impressed with her as a student.

"She brings a wealth of experience and ideas and above all enthusiasm to her studies," he said. "She has a keen analytic sense and a very real passion to excel. This is a most admirable woman. I very

much enjoyed having her as a student. She did a research essay on the use of torture in Palestine, and she was scrupulously fair and quite keen in her analysis. I think very highly of her."

Kirkwood Mayor Mike Swoboda also has high praise for Kersting, who served as his campaign coordinator during the hotly contested mayoral race that he won in April.

"She is an absolutely delightful human being with a positive attitude," he said. "She is always upbeat, and she was wonderful during the campaign. She kept me focused. She is an excellent time manager and knows how to stay focused. She has excellent people

skills, and her ego does not have to be fed."

Kersting is considered such an asset to her community that she was named 1999 Kirkwood Citizen of the Year. She has served as a board member and chair of downtown Kirkwood's special business district and as chair of the Citizens Finance Committee. She has been a member of the Meacham Park TIF (Tax Increment Financing) Committee, the Rotary Club and the police department's Crime Prevention Committee. She helped found an early childhood learning center in Meacham Park, organized a large retirement dinner for former Kirkwood Police Chief Dan Linza and is currently working on a fundraiser for the city's library.

Through the Rotary Club, Kersting got involved in the exchange student program. She counseled students and helped manage their money. This summer she hopes to go to Rome to visit two teens, a brother and sister, of whom she grew especially fond during their stay in the States.

As if her appointment book isn't full enough, Kersting also enjoys playing the violin, running, hiking with her two Weimaraner dogs and learning Arabic, which she studied for two semesters.

"The busier I am the more I get done," she said. "There's an energy that is created by energy, and it makes you more efficient in the use of your time and forces you to prioritize."

She also loves to read.

"I am looking forward to this time out of school. A lot of professors have given us reading lists, and I haven't had time to read all of the books," she said. "I am having a bookshelf crisis, though. I am running out of walls."

Prem Makeig: Portrait of the artist as a young entrepreneur

By Liam Otten

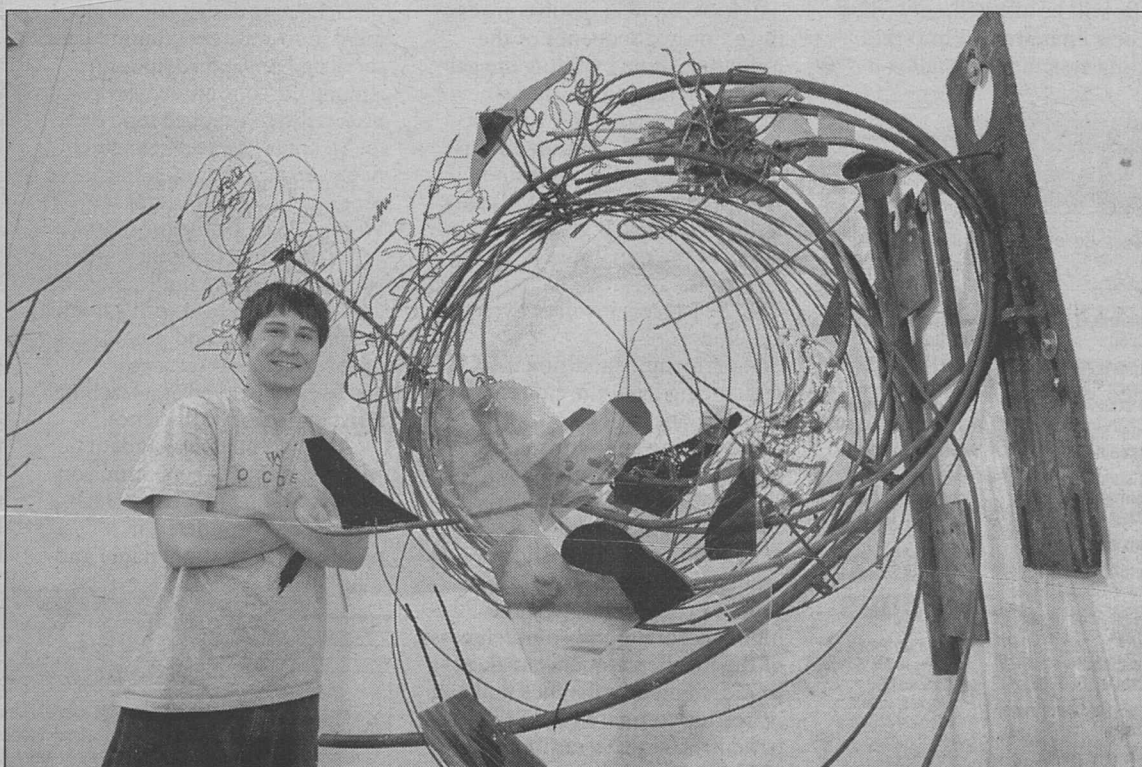
Chutzpah, for any entrepreneur, is a job requirement. This is particularly true of artists, who not only develop their own product lines but also, generally speaking, do their own marketing and create all their own new applications.

Prem Makeig, a senior in the School of Art, possesses chutzpah in spades. Over the last four years Makeig, a split major in ceramics and printmaking/drawing with a minor in computer science, has founded two Internet companies and designed a half-dozen Web sites, staged multi-media performances with professional dancers and choreographers and created public art projects for several high-profile St. Louis organizations.

"The trick is that you just tell people you're going to do something for them," Makeig explained with a perfectly straight face. "Then all you have to do is get them to agree."

If Makeig, a native of Encinitas, Calif., arrived at Washington University unsure of how his interests in computers and fine arts might fit together, he didn't take long to figure it out. In 1998, he and his sister Mehera — a painter living in Santa Fe, N.M., the country's third largest art market — launched ArtNewMexico.com, a Web site specializing in artist support services. The site, which today represents dozens of artists, offers event promotion and online galleries and allows artists to sell their work directly over the Internet.

Recently, Makeig and Bryan Cronin, a senior finance major in the John M. Olin School of Business, founded VisionDance.com, an Internet start-up company. The pair (who



Prem Makeig, senior in the School of Art, installs "Figures-in-Motion," a multimedia sculpture made of ceramic, steel and glass, at the Gallery of Art in Steinberg Hall. The work is on display through Friday, May 19, as part of the Bachelor of Fine Arts Thesis Exhibition.

formerly played right and left back on the varsity soccer team) offers a host of business-to-business Web services, from site design to database and e-commerce development to creating online software and tracking usage.

Yet for all his commercial savvy, Makeig's media skills also inform his studio work, particularly his recent collaborations with dancers. "I've always been interested in drawing people in motion," Makeig recalled. "So I started sitting in on some of the advanced classes, and afterwards the dancers would come by and look at the drawings I'd made. So

I started thinking, what if, while I'm trying to capture their rhythms and movements, the dancers could take something from what I'm doing as well?"

After some experimentation, Makeig found that the solution was not just to draw the dancers, but to draw on the dancers as they performed, via a computer-aided projection system. "Drawing is the process of making images by placing materials on the paper," Makeig noted. "Dance is the process of making images by placing the body in space. In terms of composition, a black-suited dancer against a white background is akin to a black

mark on a white piece of paper."

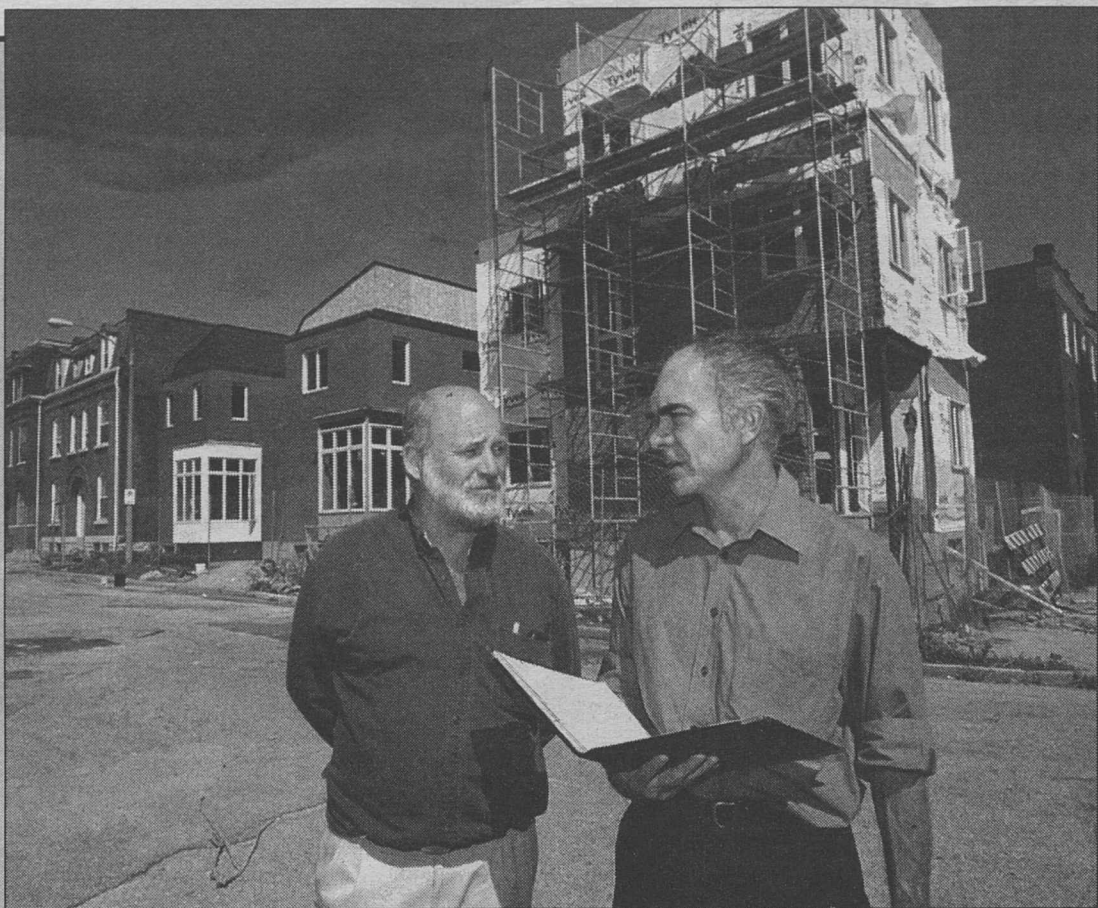
That notion — of painting as a performance art and dance as image creation — has garnered some attention in the local dance community. Earlier this year Makeig teamed up with David Marchant, artist in residence in the Performing Arts Department in Arts & Sciences, to create "Ephemeral Forms," which was presented as part of the annual professionally choreographed Washington University Dance Theatre. Last month a collaboration with St. Louis' Atrek Contemporary Dance, titled "Naked," debuted at the Sheldon Concert Hall.

The third stream of Makeig's recent activity — public art — is also perhaps his most visible. As a sophomore, he participated in the art school's University City Sculpture Series (normally reserved for upperclassmen), installing a "Burma Shave"-style series of nine silhouetted dancer figures in Moony Park. That work led to an invitation to display at the annual Saint Louis Art Fair; Makeig did, though he was not content to stop there.

"The next year I was bold enough to make the fair a proposal" for a second sculpture, Makeig said with a grin. "They agreed, paid for my materials and later bought the piece. It really taught me about the business side of things, about contracts and negotiating and the like."

This spring Makeig was commissioned to create a design for a 60-foot steel fence for University Lofts, a \$5.6 million downtown redevelopment project spearheaded by the art school. Makeig, who plans to lease one of the lofts after graduation, will begin work on the fence over the next few weeks. "I didn't know anything about working with steel before I started making these proposals," he admitted. "But the school had the resources to teach me, and so eventually I learned how to weld."

"I've always been a visual thinker, though I go through periods of doing different things," Makeig concluded. "A lot of artists sort of fall into one category or another, but I haven't been able to do that. If I get an idea I have to pursue it, and that means finding the medium that fits that project best."



City housing Jo Noero (right), the Ruth and Norman Moore Professor of Architecture, discusses nearly completed housing on St. Louis' south side with Bob Brandhorst, executive director of Youth Education and Health in Souldard (YEHS). Noero and Donald Royse, professor emeritus of architecture, designed the three Bohemian Hill prototype houses to demonstrate that new, affordable, well-designed housing is marketable in the city. YEHS, a nonprofit organization that teaches at-risk youths construction skills, has supplied much of the labor, and a \$100,000 grant from the Missouri Department of Economic Development helped fund construction costs.

Celebration

139th Commencement held at University

— from page 1

nationally known writer and lecturer.

Honorary degrees also will be awarded. In addition to Bond, who will receive a doctor of laws, recipients are: Michael M. Karl, M.D., a member of the medical school faculty for more than 50 years, doctor of science; the 1986 Nobel laureate in chemistry Yuan T. Lee, Ph.D., doctor of science; revered community leader and Laclede Gas Co. Chairman Emeritus Lee M. Liberman, doctor of humanities; world-renowned sculptor and installation artist Mary Miss, doctor of fine arts; and Alvin J. Siteman, chairman and president of Site Oil Company of Missouri and Flash Oil Corp., doctor of humanities.

Commencement begins with the traditional academic procession into Brookings Quadrangle. Edward N. Wilson, Ph.D., professor of mathematics in Arts & Sciences and chair of the Commencement Committee, will serve as grand marshal and lead the students into the quadrangle. The honorary grand marshal will be Gordon W. Philpott, professor emeritus of

general surgery.

About 130 members of the Class of 1950, celebrating their 50th reunion this weekend, will don caps and gowns to march in the procession.

The program will begin with music by the Mighty Mississippi Concert Band of St. Louis, directed by Dan Presgrave, director of instrumental ensembles and lecturer in the Department of Music in Arts & Sciences. Alumna Lori Barrett-Pagano, applied music instructor, will sing "America the Beautiful."

Following the music John F. McDonnell, chairman of the Board of Trustees, will welcome the graduates, and Wrighton will introduce Bond for the Commencement address. After Bond's address, Wrighton, assisted by members of the Board of Trustees, will confer the honorary degrees.

Gabriel Jay Greenbaum, president of the senior class, will give the student Commencement greeting. (See related story on page 1.)

Conferral of academic degrees follows, with the deans of each of the schools and Edward S. Macias, Ph.D., executive vice chancellor and dean of Arts & Sciences, assisting Wrighton. Then Wrighton will deliver his message to the Class of 2000.

Mark Kent, a bachelor of music degree candidate, will conclude the ceremony by singing the Alma Mater.

Following the ceremony, the University's schools will hold receptions for graduates and their guests.

Sewer construction to begin

Work to replace two large Metropolitan St. Louis Sewer District (MSD) sewer lines on the northeast corner of the Hilltop Campus will begin next week.

The aging sewers, which run diagonally from Brookings Drive at Skinker Boulevard to the intersection of Hoyt Drive and Millbrook Boulevard, will be replaced with a new 12-foot-diameter line on University property alongside Skinker and Millbrook.

The relocation will allow for future construction on the east end of campus, including the Uncas A. Whitaker Hall for Biomedical Engineering.

University officials are making every effort in working with MSD and the contractor to ensure that as many trees as possible are preserved. A few trees bordering the trenches could have their roots pruned by a horticulturist and will be removed only if they pose a hazard.

During the University-funded project, scheduled for completion in mid-November, the deep trenches along the quarter-mile stretch will be fenced for safety. University traffic will be affected only when the new lines are tied into the existing system in late fall.

Genome

Project's second phase to complete sequence

— from page 1

geneticists to find genes responsible for dozens of inherited diseases — including breast cancer, hereditary deafness, stroke, epilepsy, diabetes and various skeletal disorders. It also has propelled many basic biological studies. Researchers recently used it to discover the molecular basis of the sense of taste.

Phase two will involve producing a finished sequence of the human genome by filling the gaps and by increasing the overall sequence accuracy to 99.99 percent. (The working draft attains this level of accuracy at more than 90 percent of its DNA bases, but has somewhat greater uncertainty at the remainder of its positions.)

The process involves two activities:

- performing additional sequencing from the clones used in phase one, and
- selecting and sequencing some additional clones from chromosomal segments not covered in phase one.

Although working draft sequence allows for the recognition of genes themselves, the higher accuracy and completeness of the finished sequence makes it a gold-standard reference that can be readily compared to individual patients' DNA to identify specific single-letter mutations causing hereditary diseases.

In preparation for phase two, the international consortium has developed high-throughput methods for producing high-quality finished genomic sequence. In the process, approximately 20 percent of the human genome (600 million bases) has been finished to the high standard of 99.99 percent accuracy and completeness. The finished sequence of human chromosome 22 was published in December 1999, and the finished sequence of human chromosome 21 was published this month.

The international consortium has reaffirmed its commitment to immediate release of the phase two information into the public domain.

Speaker

Capitol Hill lessons applied on Hilltop

— from page 1

things could be," he said. "People would call in, and there'd be a one- or two-day turnaround on an issue they had. If they called about a policy, the staff would research it and get back to them right away. That was reassuring."

With political lessons well learned, Greenbaum has tried to apply that know-how on campus. He has represented about 1,200 constituents each of the past three years, helping design and implement innovative programming for social and philanthropic events. Among the community service projects were a canned food drive for St. Louis Homeless Resource Bank and a carnation-selling program to raise funds for the Women's Safe House of St. Louis.

In the midst of all the hard work, Greenbaum built a 3.56 grade-point average with a double major in finance and political science. He served as a peer adviser and worked as a teaching assistant in political science.

And as a business student with the name Greenbaum, you can bet that he made the Dean's List...! "I've wondered if professors look at my name and

think, 'Maybe I should give you a good grade!'" he said with a laugh, referring to Stuart I. Greenbaum, Ph.D., dean of the John M. Olin School of Business. "Dean Greenbaum seems like a great guy, but there's no relation there. Unless it helps me get a job — then perhaps we might be distant cousins!"

Actually, that base is already covered. After graduation, he will be moving to Chicago to work for ABN-Amro, a multinational bank based in the Netherlands. As part of the firm's Management Associate Program, Greenbaum will rotate to different parts of the bank for a year before deciding which area he most enjoys.

Greenbaum said he'll keep all his options open, including graduate school and perhaps an eventual foray back into politics. For expanding his options, he credits the University, which had come strongly recommended by his mother, Pearl, a School of Social Work graduate, and his father, who did a residency at Barnes Hospital.

"Being in high school and listening to your parents is definitely a feat in itself," he joked, "but I'm glad that I did listen to them. I've met great people and had great experiences, both in terms of activities and academics. I don't think I'd have been happier anywhere else."

Employment

Use the World Wide Web to obtain complete job descriptions. Go to cf6000.wustl.edu/hr/home (Hilltop) or medicine.wustl.edu/wumshr (Medical).

Hilltop Campus

Information regarding positions may be obtained in the Office of Human Resources, Room 130, West Campus. If you are not a WU staff member, call 935-9836. Staff members call 935-5906.

Medical Science Writer 980189

Manager 990233

Gift Accountant 990244

Director/Executive Faculty Liaison 990280

Engineering Librarian 990364

Counselor 000014

Regional Director of Development 000057

LAN Engineer 000094

Library Assistant 000099

Secretary/Technical Typist 000102

Assistant Director, Management Systems 000149

Administrative Coordinator 000160

Communications Technician I 000188

Research Assistant 000191

Department Secretary 000209

Researcher 000212

Department Secretary 000222

Sales Associate (part time) 000229

Manuscripts Cataloger (temporary) 000230

Systems Manager 000239

Lab Technician III 000241

Administrative Aide 000244

Residential College Director 000248

Department Secretary 000251

Associate Director of Capital Projects 000253

Research Technician 000256

Administrative Coordinator, External Relations 000259

Watchman (licensed) 000262

Secretary/Receptionist 000265

Admissions Assistant 000266

Deputized Police Officer 000272

Administrative Assistant 000273

Library Technical Assistant 000275

Manager of Systems Support and Development 000277

Administrative Assistant 000278

Assistant Director of the Writing Program (part time) 000279

Administrative Receptionist 000280

Sponsored Projects Specialist 000281

Department Secretary 000283

Accounts Receivable Service Representative 000288

Senior Shelving Assistant 000290

Assistant Sports Information Director 000291

Registrar 000292

Operations Project Accountant 000293

Project Accountant 000294

Administrative Secretary 000295

Associate Coordinator 000296

Senior Research Assistant/Junior Research Associate 000297

Coordinator of Communications and Special Events 000298

Research Technician 000300

Associate Director of Information Systems 000302

Assistant Director of Admissions 000304

Assistant to Director of Operations 000305

Research Assistant (part time) 000306

Department Secretary (part time) 000307

Research Assistant 000308

Research Assistant 000309

Application Processor II 000312

Government Grants and Contracts Reporting Specialist 000313

Senior PC Support Specialist 000314

Accounting Clerk 000317

Government Grants Specialist II 000320

Medical Campus

This is a partial list of positions at the School of Medicine.

Employees: Contact the medical school's Office of Human Resources at 362-7196. External candidates: Submit resumes to the Office of Human Resources, 4480 Clayton Ave., Campus Box 8002, St. Louis, MO 63110, or call 362-7196.

Professional Rater (part time) 000299

Medical Secretary I (part time) 001272

Staff Scientist 001358

Research Technician II 001385

Research Patient Assistant 001548

Coordinator: Protocol 001620

Research Patient Coordinator - RN 001798

Secretary II 001800

Medical Secretary I 001803

Clinical Audiologist (part time) 001810

Campus Watch

The following incidents were reported to University Police from May 8-14. Readers with information that could assist in investigating these incidents are urged to call 935-5555. This release is provided as a public service to promote safety awareness and is available on the University Police Web site at rescomp.wustl.edu/~wupd.

Crime update

University Police were notified Saturday by police in Albuquerque, N.M., that the suspect wanted in the May 4 carjacking involving a student near the Psychology Building was arrested there driving the stolen 1991 Ford Explorer. He has been charged with robbery, attempted kidnapping and motor vehicle theft and is awaiting extradition by St. Louis County police. The recovered vehicle was in good condition. Three passengers in the vehicle also were charged with

receiving and transferring stolen property, police said.

May 12

10:36 a.m. — An employee stated that someone stole a VCR, DVD player and a padlock securing the items from a room in Sever Hall. The loss was estimated at \$1,100.

University Police also responded to 12 additional reports of theft, seven reports of property damage, three false fire alarms, and one report each of harassment, burglary, motor vehicle theft, a suspicious person, trespassing and an auto accident.

Notables

Patty Jo Watson elected to philosophical society

Patty Jo Watson, Ph.D., the Edward Mallinckrodt Distinguished Professor of Anthropology in Arts & Sciences, has been elected to the prestigious American Philosophical Society.

The 250-year-old scholarly organization promotes "useful knowledge in the sciences and humanities through excellence in scholarly research, professional meetings, publications, library resources and scholarly outreach." The society has 700 members worldwide and "honors extraordinary accomplishments in all fields."

"I'm absolutely delighted to know that Pat Watson's accomplishments are being recognized by her peers in this splendid way," said Edward S. Macias, Ph.D., executive vice chancellor and dean of Arts & Sciences.

"I'm doubly pleased, because I

know she brings the excitement of her excellent research into the classroom, where she provides for our students an outstanding educational

experience," he continued. "Pat has been a leader in our faculty for many years. She brings great distinction to Arts & Sciences through her research and teaching, and we are honored to have her as a member of our faculty."

Watson is renowned for her pathbreaking work in cave archaeology and her interdisciplinary scientific contributions to an



Watson: Renowned for cave archaeology

understanding of North American prehistory. She is the author of nearly 100 scientific articles and numerous highly regarded books.

Watson is a member of both the American Academy of Arts and Sciences and the National Academy of Sciences and a fellow of the American Association for the Advancement of Science. Among her numerous recognitions are the University's Arthur Holly Compton Faculty Achievement Award, the Fryxell Medal from the Society for American Archaeology, the Distinguished Service Award from the American Anthropological Association and the Gold Medal for Distinguished Archaeological Achievement from the Archaeological Institute of America.

Two more faculty named HHMI investigators

Sean R. Eddy, Ph.D., assistant professor of genetics at the School of Medicine, and Randy L. Buckner, Ph.D., assistant professor of psychology in Arts & Sciences and assistant professor of radiology and of neurobiology at the medical school, have been selected as new Howard Hughes Medical Institute (HHMI) investigators.

The institute is a medical research organization that enters into long-term research collaboration agreements with universities and other academic research organizations. A total of 430 scientists were nominated in its national competition; 48 were selected from 31 institutions.

The University now has 11 HHMI investigators.

"These new investigators are an incredibly talented group who have begun to make their

mark on biomedical research," said HHMI president Thomas R. Cech. "We were looking for researchers who explore big questions and take risks — people with that special quality that leads to scientific breakthroughs and medical advances."

Eddy is a computational biologist. He devises methods to identify genes in the DNA sequences emerging from the Human Genome Project. He is especially interested in genes that code for noncoding RNAs. The latter include the small nucleolar RNAs that chemically modify and process the ribosomal RNA that makes up a cell's protein-synthesizing machinery. Eddy's group uses probabilistic models called Hidden Markov models and stochastic context-free grammars to analyze genomic sequences in the

computer.

Buckner's research interests include the use of neuroimaging to study memory and other brain functions. In collaboration with the Alzheimer's Disease Research Center, his current research also includes exploring how brain imaging methods can be used to understand the progression of Alzheimer's disease. A member of the faculty here since 1997, Buckner also has served on the faculty at Harvard Medical School, where he conducted several important functional magnetic resonance imaging studies of human memory function.

Buckner and Eddy will become HHMI employees but remain at the University. HHMI expects to spend between \$500,000 and \$1 million annually for each new investigator.

Pauline Kleingeld selected for Howard fellowship

Pauline Kleingeld, Ph.D., assistant professor of philosophy in Arts & Sciences, has received a fellowship from the George A. and Eliza Gardner Howard Foundation for the 2000-2001 academic year. The fellowship, which is administered by Brown University, includes a \$20,000 stipend.

Kleingeld is one of 11 recipients from a field of 167. The Howard Foundation selects fields on a rotational basis, alternating between the arts and the social sciences. This year's fellows represent anthropology, philosophy and sociology.

During her year as a Howard fellow, Kleingeld will work on her book, which carries the working title "Citizens of the World: Philosophical Transformations of

Cosmopolitanism in Late 18th-Century Germany." Kleingeld aims to provide a historical reconstruction, philosophical analysis and critical evaluation of the ideal of world citizenship, as defended in different forms in Germany at the end of the 18th century.

Kleingeld joined the University in 1993. She has teaching and research interests in the history of modern philosophy, especially Kant, feminist theory, social and political philosophy,



Kleingeld: Will work on new book

and ethics. She is the author of "Progress and Reason: Kant's Philosophy of History" (in German). She has published articles in a variety of journals.

The Howard Foundation was established in 1952 by Nicea Howard in memory of her grandparents. Although Howard had a special interest in the arts, her stated purpose was to aid the personal development of promising individuals at the crucial middle stages of their careers.

Howard fellows normally have the rank of assistant or associate professor. Support is intended to augment paid sabbatical leaves, making it financially possible for grantees to have a year in which to pursue their projects, free of any other professional responsibilities.

Faculty, administrators, staff, students get inaugural Student Union awards

Student Union recently presented inaugural awards in recognition of outstanding professors and teaching assistants in each of the five undergraduate schools "who have made a positive impact on the learning environments and lives of their students." Student Union also bestowed administrator, staff and student awards.

Faculty Member of the Year awards:

- Leslie Brown, Ph.D., assistant professor of history in Arts & Sciences;
- Lee Epstein, Ph.D., the Edward Mallinckrodt Distinguished University Professor of Political Science in Arts & Sciences;
- Zeuler Lima, visiting assistant professor of architecture;
- Rebecca A. Nolan, lecturer in art;
- Jay R. Turner, Ph.D., assistant professor of engineering and policy;
- William F. Wempe, Ph.D., visiting assistant professor of business.

Teaching Assistant of the Year awards:

- Grayson Lang (engineering);
- Emily Leppo (Arts & Sciences);
- Daniel Murray (architecture);

- Robin Pohl (business);
- Kim Wynne (art).

Administrators of the Year:

- Steven P. Hoffner, assistant vice chancellor for students and director of operations;
- Susan E. Hosack, director, Office of Student Records.

Staff Members of the Year:

- Steven J. Malter, coordinator for programming and all-campus events, Office of Student Activities;

- Lisa C. Romay, business manager, Student Union.

Student Government Awards:

Outstanding Initiative of the Year Award:

- Hatchet Yearbook — Jenny Curry, editor-in-chief, 1999-2000; Daniel Sucherman, editor-in-chief, 1998-1999.

Representative of the Year:

- Rachel Permut, sophomore, Arts & Sciences.

Outstanding Senators of the Year:

- Ginger Elsea, sophomore, Arts & Sciences;
- Holly Chen, sophomore, Arts & Sciences;
- Eileen Gohr, sophomore, architecture.

New Senators of the Year:

- Laura Mendiola, freshman, Arts & Sciences;
- Gowri Krishna, junior, Arts & Sciences.

Junior selected as Beinecke scholar

Megan A. Styles, a junior in the College of Arts & Sciences, has been awarded a \$32,000 Edwin, Frederick and Walter Beinecke Memorial Scholarship to support graduate study.

A dual anthropology and environmental studies major, Styles is an Arthur J. Lien Scholar at the University, a member of Phi Beta Kappa and serves as an undergraduate teaching assistant in anthropology. She is one of 21 students nationwide to receive the 2000 Beinecke Scholarship.

"I am thrilled Megan was selected to receive this prestigious scholarship," said Sharon Stahl, Ph.D., associate dean and director of the Honorary Scholars Program in Arts & Sciences. "Megan's love of learning, her insatiable curiosity and her boundless enthusiasm for whatever she tackles make her both a matchless scholar and an endearing mentor."

Since 1975, the Beinecke Brothers Memorial Scholarship Program has awarded more than 230 scholarships to "highly motivated" college juniors from

86 different schools. The scholarship, which is awarded before students apply to graduate school, provides financial support for two years of graduate study at an accredited university.

Styles said she is still working out the details of her course of study but would like to build upon her undergraduate majors. "I'm searching for a way to bridge my interests in anthropology and the environment and plan to pursue a graduate education in ecological anthropology, cultural geography or environmental education," she said. "I would like to explore the connections between the physical landscape and human cultural heritage and share my research with others through teaching, writing and possibly exhibit design."

Each year, roughly 80 colleges and universities are invited to nominate one student each for the scholarship. The scholarships are awarded based on the students' "demonstrated superior standards of intellectual ability, scholastic achievement and personal promise during their undergraduate career."

Students win scholarship competition

Phillip T. Gressman, a junior math and physics major in Arts & Sciences, and sophomore Brian M. Rapp, a mechanical engineering major in the School of Engineering and Applied Science, have been awarded 2000 Barry M. Goldwater scholarships for the next academic year. Each will receive up to \$7,500 to cover the cost of tuition, fees, books and room and board.

The Goldwater Scholars were selected on the basis of academic merit from a field of 1,176 mathematics, science and engineering students who were nominated by the faculties of colleges and universities nationwide. Out of this pool, 309 students were selected for this year's awards. A total of 188 of the scholars are men, and 121 are women; virtually all intend to

obtain doctorates. Twenty-four Goldwater Scholars are mathematics majors, 206 are science majors, 30 are majoring in engineering, five are computer science-related majors and 44 have dual majors within this mix.

The Goldwater Foundation is a federally endowed agency established by Congress in 1986. The scholarship program honoring Sen. Barry M. Goldwater was designed to encourage outstanding students to pursue careers in the fields of mathematics, the natural sciences and engineering. The Goldwater Scholarship is the premier undergraduate award of its type in these fields.

In its 12-year history, the foundation has awarded 3,021 scholarships worth approximately \$31 million.

Obituaries

Bernd Silver, M.D., associate professor emeritus

Bernd Silver, M.D., associate professor emeritus of clinical ophthalmology and visual sciences at the School of Medicine, died after a long illness Thursday, May 4, 2000, at the Jewish Center for the Aged in St. Louis County. He was 68.

Silver was in private practice, specializing in ophthalmic plastic surgery, from 1965 until his retirement in 1997. He earned both undergraduate and medical degrees at the University of Louisville before completing

postgraduate training at Jackson Memorial Hospital and at the Massachusetts Eye and Ear Infirmary.

Silver, who was born in Essen, Germany, fled the Nazis and came to the United States with his parents in 1939. He was an accomplished photographer and violinist.

He is survived by his wife, Sylvia Raskas Kalachek Silver; two daughters, Sharon Silver of Cincinnati and Naomi Silver Stein of University City, Mo.; a son,

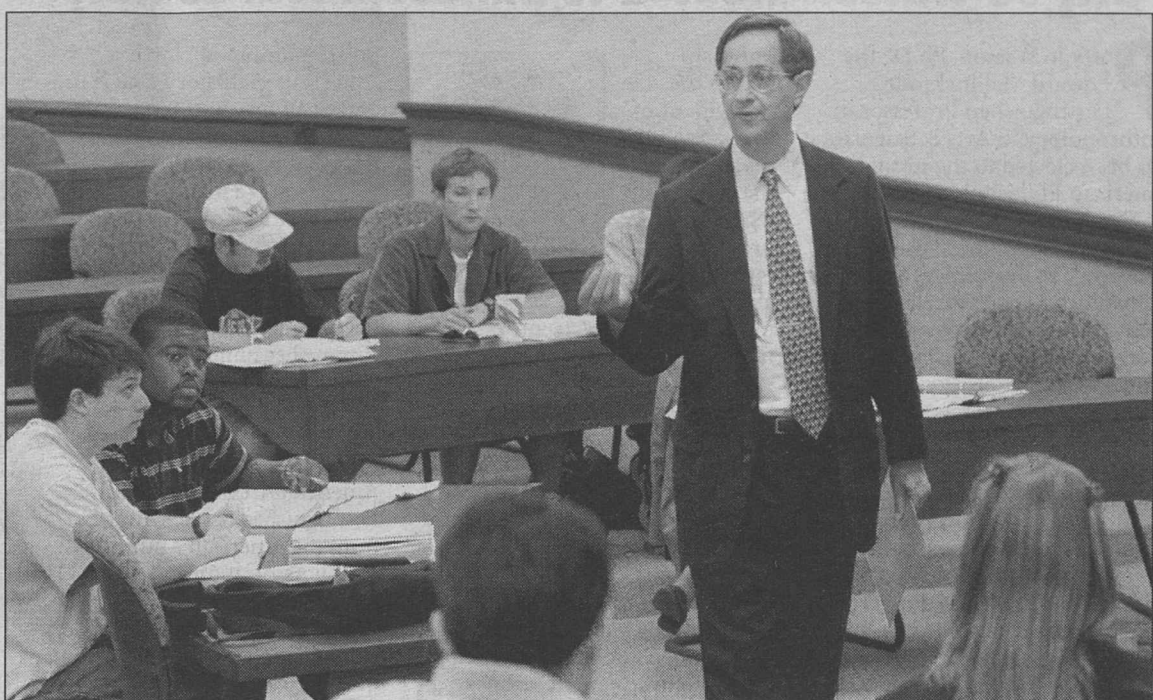
Jeffrey Silver of Chicago; a stepdaughter, Jennifer Silverman, and a stepson, Joshua Kalachek, both of University City; and six grandchildren.

Graveside services were held May 5 at Beth Hamedrosh Hagodol Cemetery in Ladue, Mo. Memorial contributions may be made to the Jewish Food Pantry, the Jewish Center for the Aged, the Missouri Botanical Garden or a charity of the donor's choice.

Washington People

Securities and Exchange Commission Chairman Arthur Levitt joked at a recent law school conference that if the Library of Congress' wing of historical documents on the nation's markets were to burn down, the government simply could call Joel Seligman, J.D., with the request: "Could you just start from the beginning?"

Such is the reputation of Seligman, dean of the School of Law, author of the book "The Transformation of Wall Street: A History of the Securities and Exchange Commission and Modern Corporate Finance" and co-author with the late Louis Loss of the 11-volume treatise "Securities Regulation." Both works are



School of Law Dean Joel Seligman, J.D., elucidates the finer points of a Supreme Court case in his new undergraduate course on the court's history, dubbed "The Greatest Hits of the Supremes."

A giant in studies of securities law

Dean Joel Seligman, J.D., has towering reputation in Wall Street legal circles

By ANN NICHOLSON

considered premier in the field and have helped establish Seligman, the Ethan A. H. Shepley University Professor, as a nationally renowned expert in securities law.

"Joel Seligman has written the definitive history of the Securities and Exchange Commission and is a great securities law scholar," noted Harvey Goldschmid, former SEC general counsel and the Dwight Professor of Law at Columbia University School of Law. "He is able to convey important developments and key policy values — such as full and fair disclosure and the imperative of integrity in our financial markets — with unmatched breadth, depth and skill."

Among the numerous legal articles and 18 books Seligman has written or co-written, "The Transformation of Wall Street" always will hold a special place. "It is easily my favorite," Seligman said. "It taught me much about the history of modern corporate finance and securities law and set the course of my career."

Masterful account

The book captures the personalities of the key figures behind the formation of the SEC and places them in their historical and political contexts, following them from the 1929-32 stock market crash through the ensuing years of securities regulation and policy decisions. Seligman draws masterfully upon a myriad of newspaper accounts, memoirs, meeting minutes, hearing transcripts, letters, unpublished papers and his own personal interviews to create a thorough and insightful account of the agency's successes and failings.

Seligman's father — a lawyer who played a role in the Nuremberg trials, produced films and wrote novels — instilled in his son a passion for writing and inspired him to attend law school. Shortly after his father's death, Seligman enrolled at Harvard University School of Law, with the intention of pursuing the film business.

After graduating in 1974, however, he worked for consumer advocate Ralph Nader on two books — one on corporate law and the other on the Harvard model of legal education. The experience gave Seligman his first insights into the SEC and convinced him to pursue a career in legal education.

Seligman's ability to understand the context of a particular challenge, combined with his high energy level and a consensus-building approach, has led to a tremendously successful first year as dean. He assumed the post last July after four years at the helm of the University of Arizona College of Law and more than two decades as a legal educator.

"It has been amazing for me to see Joel accomplish in one year as dean what it would take most deans three or four years to accomplish," said Daniel L. Keating, J.D., associate dean for academic affairs and professor of law. "I credit his vision, his energy and his love for what he is doing. The other incredible aspect of Joel's deanship is that he has continued work on his multi-volume treatise and has taught two large-enrollment courses. Joel is a person who gives new meaning to the term 'indefatigable.'"

Seligman — who has been known to paraphrase Plato about the essence of education as the "spark that jumps from each to each" — has ignited the enthusiasm of students and rekindled his own love for teaching in his course on corporations and a new undergraduate class on the Supreme Court. "Teaching allows me to remain connected to what is so special about education," he said. "It is a time when there are no phone calls or e-mails, and I can directly converse with students and teach them the value of self-learning and the importance of becoming competent thinkers."

Second-year law student Kyle Williams said he has learned a great deal both as a student in Seligman's corporations class and as the dean's research assistant. "Dean Seligman's delivery of material was a refreshing change from the typical Socratic method," Williams said. "He taught us how legal principles shape corporate behavior and transactions and then led us to think about the legal

principles in a broader, more abstract way to see if they make sense as public policy."

"Being his research assistant is a true learning experience," he continued. "My interest is almost solely in securities and transactions, and I have had the opportunity to work under one of the most recognized and thoughtful minds in the field — sort of like being a home-run apprentice under Mark McGwire."

Seligman views the law school in many respects as an "undiscovered jewel," poised to achieve the next level of excellence. Creating a new strategic plan last fall has been key to his vision for raising the school's national and international profile. Unanimously endorsed by both the law faculty and National Council, the plan addresses how to attract more outstanding students, to attract and retain additional distinguished faculty and to differentiate the school clearly from its peers.

New approach

Under Seligman's leadership, the school has committed to a "student-centered" approach in implementing the plan. Recent achievements include:

- Guaranteeing all second- and third-year students placement in the award-winning Clinical Program, which was ranked sixth in the nation by U.S. News and World Report this spring. The school also opened a new Interdisciplinary Environmental Clinic and moved its Civil Justice Clinic in-house. With the addition next year of the U.S. Attorney Clinic, the school will offer eight of these hands-on, experiential programs.

- Adding four new faculty members — one of the nation's leading Japanese law experts, an

eminent Supreme Court scholar, a specialist in health-care policy and a tax law expert. The school is seeking four additional people for the next academic year and is recognizing the outstanding achievements of faculty with three new chaired professorships in 2000-01. It also has increased the number of professionals in the career services and admissions offices.

- Launching the Center for Interdisciplinary Studies and the Institute for Global Legal Studies, designed to bring in world leaders, policy makers and distinguished academics through

major conferences and symposia. Featured speakers in 2000-01 include two Nobel laureates, a member of the

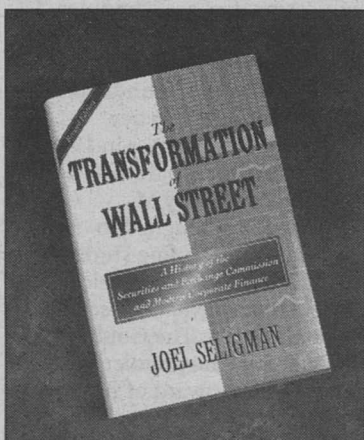
South African Supreme Court, major players in the Microsoft antitrust lawsuits and a judge on the International Criminal Court for the former Yugoslavia. Presentations on conference topics — ranging from "Norms and the Law" to the "United Nations and the Protection of Human Rights" — will be published.

- Offering a small section program for first-year students, an expanded master of law program, a three-year commitment to scholarship aid, additional scholarship opportunities for those pursuing public interest law and a redesigned Web site detailing major initiatives at the school.

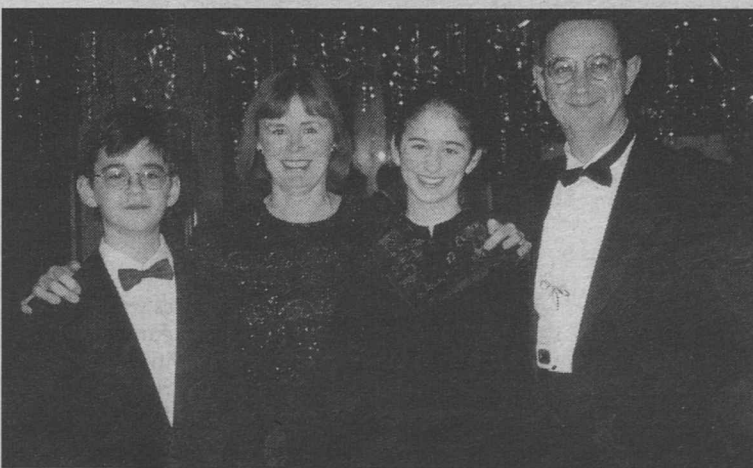
"My aspiration is to work with the law school's extraordinary group of students, faculty, administrators, staff and alumni to build on our strengths," Seligman said. "During this past year, I have discovered remarkable enthusiasm for moving ahead, and I look forward to accelerating this momentum."

"Joel is a person who gives new meaning to the term 'indefatigable.'"

DANIEL L. KEATING



"The Transformation of Wall Street" helped establish Seligman as a national expert in his field.



The Seligmans — (from left), son, Peter; wife, Friederike; daughter, Andrea; and Seligman — turn out in black tie for a New Year's Eve party at the chancellor's residence.

Joel Seligman, J.D.

Education A.B., University of California, Los Angeles, 1971; J.D., Harvard University School of Law, 1974

Family Wife, Friederike; children, Andrea, 15, and Peter, 13

Books "The Transformation of Wall Street: A History of the Securities and Exchange Commission and Modern Corporate Finance"; an 11-volume treatise, "Securities Regulation"; and the casebooks "Corporations: Cases and Materials," "Fundamentals of Securities Regulation" and "Securities Regulation"