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Volume 30 No. 15



Washington University in St. Louis

Carmon Colangelo named first dean of Sam Fox School

By LIAM OTTEN

armon Colangelo, director of the Lamar Dodd School of Art at the University of Georgia, has been named the first dean of the Sam Fox School of Design & Visual Arts at Washington University,

Chancellor Mark S. Wrighton announced Nov. 16.

"Carmon Colangelo is an accomplished artist and an experienced academic

Colangelo leader," Wrighton said. "In both capacities, he has demonstrated an exceptional ability to incorpo-

rate new concepts and new tech-

nologies alongside traditional art

and design techniques.

"His creativity and passion will help fulfill our vision of the Sam Fox School of Design & Visual Arts and realize its considerable potential."

Formation of the Sam Fox School - which aspires to become a national model for the creation, study and exhibition of multidisciplinary and collaborative work — comes amidst a nearly \$60 million campaign to improve campus arts facilities. Plans include extensive renovations to existing facilities as well as two new buildings designed by Pritzker Prize-winning architect Fumihiko Maki, both scheduled to open in fall 2006.

Colangelo's appointment effective July 1 — follows from the work of an advisory commit-tee chaired by Richard J. Smith,

See Colangelo, Page 6



Meeting with the neighbors (From left) Chancellor Mark S. Wrighton chats with Rose Windmiller, director of state relations and local government affairs; Joe Edwards, owner and developer of numerous establishments in the Delmar Loop; and Lyda Krewson, alderwoman for the 28th Ward in the city of St. Louis, following the annual "Report to the Neighbors Meeting" Nov. 1 in Uncas A. Whitaker Hall for Biomedical Engineering. During the meeting, Wrighton spoke about recent University events and activities, including the annuancement of the McDonnell International Scholars Academy Biokert & Block Williams and Activities. al Scholars Academy. Richard A. Roloff, vice chancellor, addressed current and future construction projects on campus, and a panel — including James E. McLeod, vice chancellor for students and dean of the College of Arts & Sciences; Steven P. Hoffner, vice president of Quadrangle Housing Co.; and John E. Klein, J.D., executive vice chancellor for administration — answered questions from the audience. Leah Merrifield, special assistant to the chancellor for diversity initiatives and recently director of community relations, moderated.

Corn genome to be sequenced by WUSTL center

By MICHAEL C. PURDY

enome Sequencing Center (GSC) researchenome sequencing center (enome sequencing center) at the School of Medicine will lead the sequencing of the genome of maize, popularly known as corn.

"Maize is a very exciting genome, both in terms of the roles it has played in contemporary and historic plant genetics and because of its role in agriculture," said Richard K. Wilson, Ph.D., director of the GSC, professor of genetics and lead investigator on the project. "It's a top food source for humans and animals and a leading U.S. export."

The National Science Foundation, the U.S. of Energy allocated a total of \$32 million for sequencing maize. The GSC maize genome project will receive \$29.5 million of that funding.

"By sequencing the maize genome we'll understand more about the evolution of plant genomes and more specifically the evolution of the genomes of cereals," said botanist Ralph S. Quatrano, Ph.D., the Spencer T. Olin Professor and chair of the Department of Biology in Arts

Sequencing will begin Dec. 1, with the first sequencing information to be made available online to the public starting in early 2006. Scientists estimate the project will take three years.

The maize genome's 2.5 billion base pairs in 10 chromosomes make it nearly as long as the human genome, which has 2.9 billion base pairs in 23 chromosomes. When completed, maize will be the largest plant genome se-

Although smaller than the human genome, the maize genome is estimated to contain approximately twice as many genes — 50,000-60,000, while the human genome has about 26,000. The maize genome also has large repetitive stretches and regions devoid of genes that

will make sequencing challenging.
"It's going to be like trying to put together a jigsaw puzzle with lots of blue sky and very few pieces with landscape," Wilson said. "We'll be working to minimize our data collection on the blue sky and maximize it on the landscape, covering those areas in much greater detail."

Maize is a central focus of ongoing plant genetics research and played a pivotal role in the development of a critical concept of modern genetics. Barbara McClintock, the 1983 winner of the Nobel Prize in physiology or medicine, discovered transposons, segments of genetic code that can jump from place to place

See Genome, Page 6

Researchers put 'teeth' into dinosaur classification scheme

By ALISON DRAIN

hat do you get when you cross Carcharodontosaurus with Majungatholus?

Good luck telling the two apart. Owing to paltry numbers of whole specimens that fail to illuminate a range of intraspecies morphological variation, dinosaur classification can be a task as gargantuan as some of its famed

But Josh Smith, Ph.D., assistant professor of earth and planetary sciences in Arts & Sciences, has concocted a mathematical scheme for identifying dinosaurs based upon measurements of their copious Mesozoic dental droppings. His method could help paleobiologists identify and reconstruct the lives of the creatures that roamed our terra firma many millions of years ago.

Smith, who claims he's "not very good at math," and his coauthors, David R. Vann and Peter Dodson of the University of Pennsylvania, devised a quantitative methodology by which an isolated tooth of a predatory dinosaur — a theropod — can be correlated with a given genus.

They used a variety of measurements — some of which had been defined by previous workers - that describe the basic size and general shape of the teeth as well as devised functions that help quantitatively describe the shapes of the curved surfaces possessed by the teeth. The result was a preliminary but rigorous method of classifying theropod teeth with established genera.

Smith and his colleagues published their work in a recent issue of The Anatomical Record.

See Teeth, Page 6

School of Social Work, Eden **Seminary to offer** dual degrees

By Jessica Martin

raduate students with an interest in social work and ministry leadership now have two dual-degree options through the George Warren Brown School of Social Work and Eden Theological Se-

In addition to a master of social work (M.S.W.), students can pursue a master of divinity (M.Div.) or a master of arts in pastoral studies (M.A.P.S.)

'We have very strong relationships and collaboration among faculty of the Eden Seminary and the School of Social Work," said Edward F. Lawlor, Ph.D., dean and the William E. Gordon Professor.

"An important signal of the value of this joint degree is the number of students who have independently sought out courses and degree programs at both schools."

The Rev. Cynthia Bumb, a recipient of the School of Social Work's Distinguished

See Eden, Page 6

Happy Thanksgiving!

The Record will not be published next week due to Thanksgiving. Look for our next edition Dec. 2





Listening to students Mahendra Gupta, Ph.D., dean of the Olin School of Business and the Geraldine J. and Robert L. Virgil Professor in Accounting and Management, greets students after the Undergraduate Business School Council Dean's Forum Nov. 7 in Simon Hall. The event provided an open opportunity for Olin School students to interact with and ask questions of Gupta and also Gary M. Hochberg, Ph.D., associate dean for undergraduate programs.

Women's Society gift honors Ibby Danforth

By BARBARA REA

lizabeth "Ibby" Danforth was such an important force in The Women's Society of Washington University (WSWU) that in 1995 the charitable organization renamed its scholarship fund the Elizabeth Gray Danforth Scholarship Endowment.

The endowment, which has been steadily growing for nearly 30 years, recently received a major boost from the Danforth Foundation.

Upon her death March 30, the foundation gave a \$100,000 gift to the fund, bringing the total to more than \$2 million.

"Ibby Danforth was truly one of the great citizens of Washington University and of St. Louis," noted Harriet K. Switzer, Ph.D., secretary to the Board of Trustees and University coordinator for WSWU. "Her leadership, inspiration and dedication have shaped the values and direction of the Women's Society."

"We are very grateful to the Danforth Foundation for this generous gift that benefits our students," Chancellor Mark S, Wrighton said.

"Scholarship funds are essential to attracting the best students to Washington University, and over the years the Danforth Foundation has helped us make significant strides in growing our scholarship opportunities.

"This special scholarship honors a great leader of Washington University and also strengthens our ties with the St. Louis community."

The Elizabeth Gray Danforth Scholarship, created in 1976, has a specific purpose: It funds the full two-year tuition costs for a selected student from the St. Louis Community College system to transfer to Washington University.

The fund has made dreams come true for many students.

"Both the Women's Society and our scholarship program meant a great deal to Ibby," said JoAnn Sanditz, president of WSWU. "She would have been delighted to know the Danforth Foundation is keeping the dream of a Washington University education alive for so many deserving students in our community."

Recipients are selected by a committee of representatives from the University and the Women's Society. In addition to academic excellence, the committee considers enthusiasm for learning, clarity of goals, potential for leadership and dedication to community service.

This year, the dream came true for Shahrouz Yousefi.

An Iranian, Yousefi came to the United States four years ago to escape religious persecution. Arriving in St. Louis alone, speaking no English and knowing no one, he quickly learned the language and used his newly acquired skills to build an impressive academic and leadership record at Forest Park Community College.

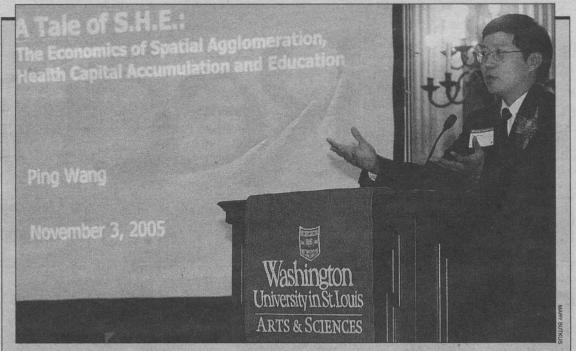
This fall, he enrolled in WUSTL's School of Engineering & Applied Science.

More than 600 persons belong to WSWU, which was founded in 1965 to cultivate ambassadors for the University and to provide services for students, faculty and staff.

In addition to gifts, the Elizabeth Gray Danforth Scholarship Fund is supported by membership dues and the proceeds from Bear Necessities, WSWU's store located on the South 40.

The deadline for scholarship applications is March 15.

Persons interested in transferring to Washington University may send inquiries to the Office of Undergraduate Admissions.



Seigle Family Professorship Internationally renowned economist Ping Wang, Ph.D., chair of the Department of Economics in Arts & Sciences, gives a presentation of his scholarly work during his installation as the inaugural Seigle Family Professor in Arts & Sciences Nov. 3 in Holmes Lounge. The professorship was established by University Trustee and alumnus Harry Seigle, who wished to honor his family, many of whom also are alumni. Wang came to WUSTL this fall from Vanderbilt University; among his areas of expertise are economic theory, macroeconomics, monetary economics, health and social economics, growth and development, and spatial economics. "Ping Wang brings distinction and a broad-based background in economics to Washington University," said Edward S. Macias, Ph.D., executive vice chancellor, dean of Arts & Sciences and the Barbara and David Thomas Distinguished Professor in Arts & Sciences. "We are delighted to attract someone of his stature to Arts & Sciences. His experience in teaching, research, administration and service to the discipline are exceptional assets for our Department of Economics."

Social services' Children's Division conference here

By Jessica Martin

embers of the Missouri Department of Social Services' Children's Division (CD) will gather Dec. 1 with child welfare researchers from around the state to plan future research collaborations.

The conference in the Women's Building Formal Lounge, hosted by the Center for Mental Health Services Research at the George Warren Brown School of Social Work, will also provide an overview of ongoing research involving the Children's Division and the ways it makes use of the research to improve the welfare of Missourians.

The 9-11 a.m. session of the

conference is free and open to the public and will feature a presentation by Paula Neese, interim director of the Children's Division, and a keynote address by Mark Testa, Ph.D., director of the Children and Family Research Center at the University of Il-

Neese will provide an overview of the Children's Division's strengths, priorities and knowl-

edge needs, as well as the current state of child welfare in Missouri. Testa's lecture will focus on the current state of child welfare research nationally.

For more information, go online to gwbweb.wustl.edu/cmhsr/seminars.html or call Sally Haywood, director of administration at the Center for Mental Health Services Research, at 935-5741.

Campus store sale Nov. 30

By Andy Clendennen

t's a chance to show some school pride, to perhaps win a prize or just get some early Christmas shopping done.

The Campus Store in Mallinckrodt Student Center is holding its annual Faculty & Staff Appreciation Event from 3-8 p.m. Nov. 30.

Faculty and staff with a valid University identification will receive a 30 percent discount on all regular and sale-priced merchandise, with the following exceptions: textbooks, software, professional reference materials, magazines, gift certificates, snack foods, cigarettes, film developing,

postage stamps and parking permits.

Bill Lenihan will perform with his band from 4-7 p.m., and several prizes will be up for lucky names drawn from registered

These prizes include a \$25 gift certificate to Schlafly Bottleworks; a \$60 "Great Restaurants" gift certificate that can be used at Blue Water Grill, Big Sky, Remy's Kitchen and Wine Bar or Ellie Forcella; two tickets to the Chase Park Cinemas; and Roman Art, by Nancy Ramage and Andrew Ramage.

For more information, call 935-5580.

Symphony orchestra show Nov. 20

The Washington University Symphony Orchestra will be joined by Marissa Shields, winner of the Department of Music in Arts & Sciences' annual Young Artist Piano Concerto Competition, for a performance at 3 p.m. Nov. 20 in Graham Chapel.

Dan Presgrave, instrumental music coordinator in the Department of Music, conducts the 70-plus-member symphony orchestra.

Shields — a freshman at Marquette High School and a piano student of Marlita Weiss will appear as soloist for *Piano* Concerto in D Major by Franz Joseph Haydn. Also on the program will be Outdoor Overture by Aaron Copland and Lieutenant Kijè Suite by Sergei Prokofiev.

The concert is dedicated to Sona Haydon, a longtime lecturer in piano, who died Oct. 29 of complications from leukemia.

A frequent clinician and jury member for area piano examinations, Haydon inaugurated the Young Artist Piano Concerto Competition in 2001.

Admission is free and open to the public. For more information, call 935-4841 or e-mail staylor@ wustl.edu.

Winter weather information available

f a severe snow or ice storm causes the University to alter the normal work and/or class schedules, an announcement will be posted on the University's home page (wustl.edu), and a number of media outlets will air an announcement.

Separate announcements will be made regarding the Hilltop Campus (includes all campuses other than the Medical Campus), evening-school classes and the Medical Campus, and will apply only to WUSTL students, faculty and staff.

Media outlets that air such announcements are KSDK-TV Channel 5, KMOV-TV Channel 4, KTVI-TV Channel 2, KDNL-TV Channel 30, KMOX-AM (1120) and WSIE-FM (88.7).



Walk your bike

Students walk across the pedestrian overpass near the Cyclotron on the north side of the Hilltop Campus. The overpass connects the campus with nearby neighborhoods, including the Delmar

hoods, including the Delmar Loop. Those who use the overpass are being encouraged to slow down and walk their bikes to reduce the risk of injury to themselves and to others. Skateboarding is prohibited on the bridge and access ramps.



JOE ANGELES PHOTO

Program helps adults with low vision live independently

By Judy Martin

onica Perlmutter is taking her "show on the road" to help older adults with low vision live independently in their homes.

"Many individuals with low vision are doing well in terms of their overall physical health," said Perlmutter, an occupational therapist at the School of Medicine. "But problems arise when low vision makes it difficult to judge depth of steps, pay bills or distinguish where food is on a plate."

Nearly 4 million adults 65 and older have visual impairment severe enough to interfere with daily activities. Macular degeneration, diabetic retinopathy, inoperable cataracts and glaucoma are leading causes of low vision.

As part of the Occupational Therapy In-home and Community Home Services program, Perlmutter — armed with a notepad and light meter — arrives for home visits ready to assess and offer suggestions to maximize vision and safety.

The first visit, which usually lasts an hour, includes a structured interview to determine what is important to the individual. The home environment is also checked for accessibility,

lighting and safety.

Clients are seen for an average of 2-3 additional visits. Adaptive strategies and home environment modifications are tailored to meet the individual's specific needs.

"One person may need help in the kitchen operating the stove, while another may be concerned that they can no longer pay their bills or play bridge," Perlmutter said.

To increase the visibility of the stovetop and oven controls, Perlmutter marks the appliance controls with brightly colored raised dots. Use of a large print checkbook, bold markers and proper lighting promotes greater independence in managing personal finances.

Large-face playing cards and a contrasting background on the card table allows older adults to participate in their weekly bridge game. Similar strategies are used for other self-care, home management and leisure tasks so that individuals are able to return to these valued daily activities.

Medicare and other insurance plans typically approve the home services program for persons with low vision if there is a physician referral.

For more information, call 86-1635.



Occupational Therapy Inhome and Community **Home Services** program, occupational therapist Monica Perimutter (left) checks the lighting at a work area of client Gay Hirsch, who has low vision. Perlmutter has added a floor light to help Hirsch see her paperwork.

ROBERT BOSTO

Brain scan, cerebrospinal fluid analysis may help predict Alzheimer's

By MICHAEL C. PURDY

Acombination of brain scanning with a new imaging agent and cerebrospinal fluid (CSF) analysis has left neuroscientists encouraged that they may finally be moving toward techniques for diagnosing Alzheimer's disease before its clinical symptoms become apparent.

"When clinical symptoms start, the disease process has already been at work in the patient for many years and possibly even decades," said Anne Fagan Niven, Ph.D., research associate professor of neurology at the School of Medicine. "Up to 30 percent of neurons in vulnerable areas are already dead, and you can't get them back.

"So finding markers that can

help us identify patients prior to symptoms is really our big push now."

With colleagues Mark Mintun, M.D., professor of radiology, and David Holtzman, M.D., the Andrew B. and Gretchen P. Jones Professor and head of the Department of Neurology, Fagan studied a group of 24 people that included individuals diagnosed with very mild and mild Alzheimer's disease, and cognitively normal subjects.

As expected, in patients with cognitive impairments believed to be attributable to Alzheimer's disease, researchers found low CSF levels of amyloid beta 42 (A-beta 42), the principal ingredient of the brain plaques that are characteristic of Alzheimer's disease. In the same individuals, brain scans

with a new imaging agent that reveals the presence of amyloid plaques in the brain were positive.

What scientists didn't anticipate was that three cognitively normal subjects would have both low CSF levels of A-beta 42 and positive results from the brain scans. Fagan stressed that although this aspect of their findings was very intriguing, it doesn't prove that the three normal subjects will one day develop clinical Alzheimer's disease.

"For now, definitive diagnosis of Alzheimer's disease still cannot be made until autopsy," she said. "It's going to take a number of years for us to fully assess these results, because all we can do now is follow the participants closely, waiting to see if they eventually develop Alzheimer's dementia."

Fagan presented the results of the study Nov. 15 at the annual meeting of the Society for Neuroscience in Washington, D.C. The study will also appear in the Annals of Neurology.

Many prior studies have found that A-beta 42 levels drop in the cerebrospinal fluid of Alzheimer's disease patients. A-beta 42 is naturally produced in the brain, and researchers suspect that the creation of amyloid plaques may be linked to breakdowns of the processes that degrade or normally clear A-beta 42 from the brain via the CSF and the bloodstream.

However, natural variations occur in CSF A-beta 42 levels in healthy subjects, and the amount this level drops in Alzheimer's patients also varies. And that left no distinct level scientists could identify as a diagnostic marker characteristic of Alzheimer's disease

Gisease.

Fagan wanted to see if useful distinctions could be made by combining data on CSF A-beta 42 levels with results from brain scans with a new imaging agent, PIB (for Pittsburgh compound B). Developed by researchers at the University of Pittsburgh, PIB temporarily sticks to amyloid plaques in the brain but washes clean in

30-60 minutes. Scientists can detect this sticking with a PET scanner.

Using PIB data available from ongoing studies of volunteers at the Memory and Aging Project at the Alzheimer's Disease Research Center at Washington University, Fagan compared PIB scan results and levels of CSF A-beta 42.

"When I realized that everyone who was PIB positive also had lower CSF A-beta 42 levels, I had one of those 'aha!' moments that makes it so exciting to be a scientist," Fagan said.

Other CSF factors, such as levels of another form of A-beta and of a molecule found in the braincell tangles created by Alzheimer's disease, did not correlate with positive PIB scan results.

"The hope is that 10-20 years from now, we'll give people a PIB scan, draw and analyze their CSF, and combine that with other factors to get a global score for their personal risk of Alzheimer's disease," Fagan said. "We have diseasemodifying treatments on the way to clinical trials right now, and tests that can help us detect Alzheimer's earlier will both help us put those treatments to better use and assess the results they produce in patients."

Range of motion limited in pro pitchers

By Jim Dryden

Now that the Chicago White Sox have swept the Houston Astros in the World Series, most baseball players are taking some time to rest. Time off is especially important for pitchers because throwing a baseball overhand is an unnatural motion and a burden on the shoulder and the elbow.

Now a research team led by WUSTL sports medicine specialists has found that professional pitchers have significantly decreased range of motion in their throwing elbows.

The researchers reported on a study of 33 professional baseball pitchers in the October issue of the American Journal of Sports Medicine. Trainers and team doctors measured the pitchers' ability to bend, straighten and rotate their elbows and found that range of motion in the dominant elbow was limited when compared to the other arm.

"On average, pitchers had an 8 degree loss of the ability to straighten their elbow when compared to the elbow in their non-dominant arm," said first author Rick W. Wright, M.D., assistant professor of orthopaedic surgery and co-director of the Division of Sports Medicine at the School of Medicine and Barnes-Jewish Hospital.

"But despite the fact that they lose range of motion, we've been unable to show that there's a func-

The pitchers in the study not only couldn't straighten their arm as far, called extension, they also had difficulty bending the elbow (flexion). A pitcher's dominant elbow bent about 5 degrees less than the elbow in his other arm.

But the study found no significant difference in the ability of the elbow to rotate (supination and pronation).

Wright, the head team physician for the St. Louis Cardinals, said it's unclear how the losses in range of motion occur.

"Once we looked at all of the data and did the statistical analysis, we could not find a correlation between increased age, innings pitched or injuries," he said. "We could not find anything that explained why range of motion was inhibited in the pitching elbow."

That was a surprise.

Although it's not clear why the losses in range of motion occur, Wright said it is clear that the loss is not enough to hurt a pitcher's ability to perform on the mound.

He said even with the losses in motion, most pitchers are still flexible enough to throw a baseball effectively. He added that the losses in motion should not have a negative impact on normal daily activities outside of baseball.

It's likely that professional pitchers start with strong, flexible elbows that can take high amounts of stress, qualities that helped get them to the pro level, Wright said.

"By the time they reach this level, a lot of people have been eliminated who didn't have elbows that could stand up to these stresses," he said. "These players definitely have shown that their elbows are made for pitching."

But not right now. With the World Series in the rear-view mirror and spring training still months away, he said sensible pitchers are resting their elbows.

"At this time of year, I recommend that pitchers shut it down as far as throwing a baseball," Wright said. "They need this time to rest and to work on basic strengthening and stretching.

"In December or January, they'll restart a throwing program with the goal of being ready when spring training begins."



Siteman Cancer Center greeting cards The Siteman Cancer Center is again offering greeting cards for the holiday season. Vicki Friedman, director of media services at the School of Medicine and a cancer survivor, designed the cards. They are available in packets of 15 for \$12. Proceeds benefit the Siteman Cancer Center. For more information or to order cards, call 362-7844.

University Events

Autism • Is Your Beer Safe? • Teen Employment

"University Events" lists a portion of the activities taking place Nov. 18-Dec. 8 at Washington University. Visit the Web for expanded calendars for the Hilltop Campus (calendar.wustl.edu) and the School of Medicine (medschool, wustl.edu/ calendars.html).

Exhibits

American Writers at Home - Photographs From the Book by J.D. McClatchy and Erica Lennard. Washington University Special Collections. Olin Library, Grand Staircase Lobby and Ginkgo Reading Rm. 935-5495

ITeach Symposium 2006. Through Nov. 30. Olin Library Lobby. 935-6626

Film

Tuesday, Nov. 29

7:30 p.m. Arabic/Persian Film Series. Date With the Unknown. Sponsored by the Dept. of Asian and Near Eastern Languages and Literatures. Duncker Hall, Rm. 101. 935-5110.

Friday, Dec. 2

6 & 8:30 p.m. Travel Lecture Series. Irish Stories and Glories. Sandy Mortimer, dir. Cost: \$5 at the door. Graham Chapel.

Lectures

Friday, Nov. 18

8:30 a.m.-4:30 p.m. Center for the Application of Information Technology Workshop. "The Business-IT Partnership: Delivering Business Results." Cost: \$900; reduced fees available for CAIT member organizations. CAIT, 5 N. Jackson Ave. 935-4444

9:15 a.m. Pediatric Grand Rounds. "Informatics for Advanced Disease Surveillance." Kenneth Mandl, div. of emergency medicine, Children's Hospital Boston Clopton Aud., 4950 Children's Place.

2-6 p.m. Siteman Cancer Center CME Course. "Medical, Surgical and Radiological Management of Brain Tumors: Treatment Options Including Gamma Knife." Cost: \$45. Eric P. Newman Education Center. To register: 362-6891.

7:30 p.m. Saint Louis Astronomical Society Lecture. "Dark Energy in the Ac-celerating Universe." Tapei Cheng, prof., U. of Mo.-St. Louis. McDonnell Hall, Rm.

Monday, Nov. 21

Noon. Program in Occupational Therapy

Occupational Performance Needs of Children With Autism." Patti LaVesser, asst. prof. of neurology and of occupational therapy. 4444 Forest Park Blvd., Lvl. 1, Rm. 1501. 286-1600.

Noon. Work, Families, and Public Policy Brown Bag Seminar Series. "Diversity and Productivity in Production Teams. Barton Hamilton, prof. of economics, management and entrepreneurship. Eliot Hall, Rm. 300. 935-4918.

4 p.m. Condensed Matter/Materials and **Biological Physics Seminar.** "Synthesis/ Characterization of Boron and Metal Boride Nanostructures; Mechanics of Nanotubes and Nanowires; Novel High-Aspect Ratio Platelets From Graphite. Rodney Ruoff, John Evans Professor of Nanoengineering, Northwestern U. (3:45 p.m. coffee.) Compton Hall, Rm. 241.

4 p.m. Immunology Research Seminar Series. "Investigating the Protective Innate and Adaptive Immune Responses Against West Nile Virus." Michael Diamond, asst. prof. of medicine. Moore Aud., 660 S. Kingshighway. 362-2763

5:30 p.m. Cardiac Bioelectricity & Ar-rhythmia Center Seminar Series. "The Long QT Syndrome: From Genes to Sudden Cardiac Death." Peter J. Schwartz, and chair of cardiology, U. of Pavia, Italy. Whitaker Hall, Rm. 218. 935-7887.

7 p.m. Sam Fox School Architecture Lecture Series. Larry Malcic, sr. vice pres., dir. of design, HOK, London. Steinberg Hall Aud. 935-9347.

Tuesday, Nov. 22

Noon. Molecular Microbiology & Microbial Pathogenesis Seminar Series. "The Role of Bacterial Outer Membrane Vesicles in Toxin Trafficking and Envelope Stress. Meta Kuehn, asst. prof. of biochemistry, Duke U. Cori Aud., 4565 McKinley Ave. 362-6772.

Monday, Nov. 28

4 p.m. Immunology Research Seminar Series. "Endogenous and Exogenous Lipid Ligands Activate NKT Cells During Microbial Infections." Albert Bendelac, prof. of immunology, U. of Chicago. Moore Aud., 660 S. Kingshighway.

5-8 p.m. Center for the Application of Information Technology Workshop.
"Business Finance & Budget Fundamentals for IT Professionals." (Continues 5-8 p.m. Mondays & Wednesdays, Nov. 28-Dec. 7.) Cost: \$820, reduced fees available for CALT. able for CAIT member organizations. CAIT, 5 N. Jackson Ave. 935-4444.

5:30 p.m. Cardiac Bioelectricity & Arrhythmia Center Seminar Series. "Electrocardiographic Imaging (ECGI): A New Noninvasive Imaging Modality for Cardiac Electrophysiology and Arrhythmias." Yoram Rudy, the Fred Saigh Distinguished Professor of Engineering. Whitaker Hall, Rm. 218.

Concrete, but no Ted Drewes here Architecture student Fernando Castro-Caratini mixes

concrete for the foundation of a new shade pavilion located just east of the University City Post

Office, in the Delmar Loop. The project — which began construction Nov. 9 — comes as part of a

design/build studio led by Carl Safe (far left), professor of Architecture in the Sam Fox School of

Design & Visual Arts. When completed, the wooden structure will provide visitors with a shaded,

relaxed setting while also giving young architects hands-on experience in all aspects of the con-

struction process. In previous years, Safe's students have developed similar projects for the

community Crown Center, 8350 Delcrest Drive.

courtyard of Market in the Loop, in the 6600 block of Delmar Boulevard, and for the retirement

Streaming audio enables some online Assembly Series lectures

ave you recently missed an Assembly Series lecture because you had a conflict and couldn't make it to Graham Chapel? If the speaker you were interested in hearing gave permission to put the lecture on a WUSTL Web site, then you will soon be able to hear it.

With help from the University Libraries and the University webmaster, some Assembly Series lectures will soon be available online via stream-

"Beginning this fall, each speaker was asked if he or she would allow us to put the speech on the Web after the lecture," said Barbara Rea, director of major events & special projects, who directs the Assembly Series. "Fortunately for us, many have agreed to let us do it."

Class scheduling conflicts have become an

increasing problem for many undergraduates who want to attend the typically Wednesday-morning

"I really enjoy the Assembly Series, but like many students, I frequently don't have time to go in person," sophomore Derek Dohler said. "When I can stream the talk, I can listen to it later when I'm at home."

Rea said this would not be possible without the assistance of University Libraries.

"We couldn't do this on our own," she said. "Gail Wright, the University webmaster, stepped forward and offered her help and room on their server. We are very grateful for the collaboration, which benefits everyone.'

The online lectures will be posted at assembly series.wustl.edu.

Tuesday, Nov. 29

Noon. Molecular Microbiology & Microbial Pathogenesis Seminar Series. "Activation and Inhibition of the Interferon Antiviral System." Curt Horvath, assoc. prof. of biochemistry, molecular biology and cell biology. Cori Aud., 4565 McKinley Ave. 362-4829.

Noon. Program in Physical Therapy Re-search Seminar. 4444 Forest Park Blvd., Lower Lvl., Rm. B108/B109. 286-1404.

Wednesday, Nov. 30

Noon. George Warren Brown School of Social Work Lecture Series. "Risk Behaviors of Gay, Lesbian, and Bisexual Youths." Margaret Rosario, assoc. prof. of psychology, City U. of New York. Cosponsored by the Comorbidity and Addictions Center at the School of Social Work. Brown Hall Lounge. 935-6661.

4 p.m. Biochemistry and Molecular Biophysics Seminar. "dsDNA Translocases: Energetics and Translocation. Piero Bianco, asst. prof. of microbiology and immunology, U. at Buffalo. Cori Aud., 4565 McKinley Ave. 362-4152.

4 p.m. Physics Colloquium. "Parity Violation in Electron-Electron Sharing." Emyln Hughes, dept. of physics, Calif. Inst. of Tech. (3:30 p.m. coffee, Compton Hall, Rm. 245.) Crow Hall, Rm. 204.

7 p.m. Science on Tap Lecture. "Plants and People - Is the Beer You Are Drinking Safe?" Barbara Schaal, Spencer T. Olin Professor in Biology. Schlafly Bottleworks, Crown Rm., 7260 Southwest Ave. 935-5285.

Thursday, Dec. 1

8:30 a.m. Center for the Application of Information Technology Workshop.
"Strategies to Increase Your Value as an IT Professional." (Continues 8:30 a.m.-4 p.m. Dec. 2.) Cost: \$1,195, reduced fees available for CAIT member organizations. CAIT, 5 N. Jackson Ave. 935-4444.

Noon. Center for Health Policy Brown Bag Seminar Series. "Public Deliberation Forums: Community Solutions for Missouri's Health Insurance Crisis." Gwen Ratermann, assoc. dir. of the Center for Health Policy, U. of Mo. Simon Hall, Rm. 241. 935-9108.

4 p.m. Ophthalmology & Visual Sciences Seminar. "Role of Retinal Photoreceptors in Non-Image-Forming Visual Functions. Samer Hattar, asst. prof. of biology and neurosciences, Johns Hopkins University. Maternity Bldg., Rm. 725. 362-1006.

Saturday, Dec. 3

7:30 a.m.-Noon. Cardiovascular Division CME Course. "Congestive Heart Failure Update." Cost: \$95. Eric P. Newman Education Center. To register: 362-6891

Monday, Dec. 5

Noon. Work, Families, and Public Policy Brown Bag Seminar Series. "Teen Employment: Shifting Patterns by Parental Education and Family Structure." Anne Winkler, prof. of economics, U. of Mo. St. Louis, Eliot Hall, Rm. 300, 935-4918

4 p.m. Immunology Research Seminar Series. "Dynamics of T Cell Responses in Vitro and in Vivo." Matthew Krummel, prof. of pathology, U. of Calif., San Francisco. Moore Aud., 660 S. Kingshighway. 362-2763.

5:30 p.m. Cardiac Bioelectricity & Arrhythmia Center Seminar Series. "Surgery for Atrial Fibrillation: Present State of the Art and Future Directions." Ralph Damiano, John M. Shoenberg Professor of Surgery. Whitaker Hall, Rm. 218. 935-7887.

Tuesday, Dec. 6

Noon. Molecular Microbiology and Microbial Pathogenesis Seminar Series. "Catalytic Lattices on Pirated Mem-

branes: Cell Biology of Poliovirus RNA." Karla Kirkegaard, prof. and chair, dept. of microbiology and immunology. Cori Aud., 4565 McKinley Ave. 362-4829

5:30 p.m. Biophysical Evenings Seminar. "Thrombin Allostery." Enrico Di Cera, prof. of biochemistry and molecular biophysics. Cori Aud., 4565 McKinley Ave.

Wednesday, Dec. 7

7:30 a.m. Center for the Application of Information Technology Workshop. "The Business Value of Portal Technology." World Trade Center Saint Louis, 121 S. Meramec, Ste. 1111. 935-4444.

4 p.m. Biochemistry and Molecular Bio-physics Seminar. "Mechanistic Explorations on Cotranslational Protein Folding." Silvia Cavagnero, asst. prof. of chemistry, U. of Wis. Cori Aud., 4565 McKinley Ave. 362-4152.

Thursday, Dec. 8

4 p.m. Ophthalmology & Visual Sciences Seminar. "Animal Models for Autosomal Dominant Cataract." Mark Petrash, prof. of ophthalmology & visual sciences Maternity Bldg., Rm. 725. 362-1006.

On stage

Friday, Nov. 18

8 p.m. OVATIONS! Series. Noche Flamenca. (Also 8 p.m. Nov. 19; 2 p.m. Nov. 20.) Cost: \$28, \$24 for seniors & WUSTL faculty & staff, \$18 for students and children. Edison Theatre. 935-6543.

8 p.m. Performing Arts Dept. Production. Escape From Happiness. William Whitaker, dir. (Also 8 p.m. Nov. 19; 2 p.m. Nov. 20.) Cost: \$15, \$9 for students, children, seniors, WUSTL faculty & staff. Tickets are available through Edison Theatre. Mallinckrodt Student Center, A.E. Hotchner Studio Theatre. 935-6543.

Friday, Dec. 2

8 p.m. Performing Arts Dept. Production. Reach/Rebound. Cecil Slaughter, dir. (Also 8 p.m. Dec. 3; 2 p.m. Dec. 4.) Cost: \$15, \$9 for students, children, seniors, WUSTL faculty & staff. Edison Theatre. 935-6543.

Sports

Friday, Nov. 18

p.m. Women's Basketball vs. Coe College. WUSTL Tip-off Tournament. (Continues 2 p.m. Nov. 19.) Athletic Complex. 935-4705

Saturday, Nov. 19

All Day. Swimming and Diving. WUSTL Thanksgiving Invitational. (Continues Nov. 20.) Athletic Complex. 935-4705.

Tuesday, Nov. 22

6 p.m. Women's Basketball vs. Webster U. Athletic Complex. 935-4705.

8 p.m. Men's Basketball vs. Webster U. Athletic Complex. 935-4705.

Saturday, Nov. 26

3 p.m. Women's Basketball vs. Middlebury College. Annual McWilliams Classic. (Continues 1 p.m. Nov. 27.) Athletic Complex.

Friday, Dec. 2

8 p.m. Men's Basketball vs. U. of Dallas. Annual Lopata Classic. (Continues 6 p.m. Dec. 3.) Athletic Complex. 935-4705.

And more...

Tuesday, Nov. 22

7 p.m. African and African American Studies Lecture and Performance. A Tribute in Honor of August Wilson. Sponsored by the Black Rep, the African and African American Studies Program and the Performing Arts Dept. Mallinckrodt Student Center, A.E. Hotchner Studio Theatre, 935-5690

Thursday, Dec. 1

8 p.m. Writing Program Reading Series. Scott Heim, poet and author. Duncker Hall, Rm. 201, Hurst Lounge. 935-7130.

Music

Sunday, Nov. 20

3 p.m. Concert. Washington University Symphony Orchestra. Dan Presgrave, dir. Graham Chapel. 935-4841

8 p.m. Jazz at Holmes. Scott Alberici, clarinet. Ridgley Hall, Holmes Lounge. 935-4841.

ubmit "University Events" items to Genevieve Podleski of the Record staff via:

(1) e-mail — recordcalendar @wustl.edu:

(2) campus mail -

Campus Box 1070; or

(3) fax - 935-4259.

Women runners win 2nd regional crown

The No. 4 women's cross country team claimed its second NCAA Midwest Region championship Nov. 12 in Peoria, Ill., advancing to the NCAA Championship meet Nov. 19. The women also claimed the regional championship in 2002.

WUSTL's men finished sixth at regionals. Still, senior Brennan Bonner and junior Kevin Gale each qualified individually for the NCAA meet with their top-20

The women, led by seven All-Region Team members, claimed their second title with 76 points. No. 3 University of Wisconsin-La Crosse took second with 99 points. The men finished sixth with 163 points, while No. 2 University of Wisconsin-La Crosse claimed the title with 42 points.

All seven Bears women's runners finished in the top 35. Junior Beth Herndon represented the lone top-10 finisher with a sixthplace finish. Senior Stephanie Felz (13th), sophomore Tyler Mulkin (18th), junior Lindsay Harkema (19th) and sophomore Kate Pentak (20th) rounded out the scoring. Senior Andrea Moreland (29th) and sophomore Amy Levine (34th) also earned all-region

Bonner crossed the finish line in eighth place, while Gale finished 20th.

Volleyball team wins regionals

The No. 3 volleyball team won the NCAA Central Region Championship Nov. 11-12. WUSTL defeated No. 9 Carleton College, 3-0, and host and No. 13 University of St. Thomas, 3-0, to secure the region title.

Sophomore middle hitter Emilie Walk tallied 12 kills and seven blocks, while junior right attacker Whitney Smith posted a match-high 14 kills. Sophomore outside hitter Haleigh Spencer posted 10 kills and 14 digs, while senior setter Kara Liefer added six kills, 11 digs and 38 assists.

The Bears played the University of La Verne in the NCAA quarterfinals Nov. 17. Results were not available at presstime.

Volleyball has five named All-America

Five volleyball players were named to the American Volleyball Coaches' Association (AVCA) All-America Team, as announced by the AVCA.

The five total citations matched the program's highest

Bears receiver Duesing puts exclamation point on career

By CHRIS MITCHELL AND NICK POVALITIS

ears senior wide receiver Brad Duesing etched his name into the NCAA record book Nov. 12 with a school-record 15 catches for 218 yards and two touchdowns to lead the Bears to a 42-24 season-finale win at Greenville College

With that performance, Duesing eclipsed 1,000 receiving yards for a fourth consecutive season, becoming just the second player in NCAA history Division I, II or III — to record four consecutive 1,000yard receiving seasons. Mark Bartosic (2000-03) of Susquehanna University was the first to achieve the feat.

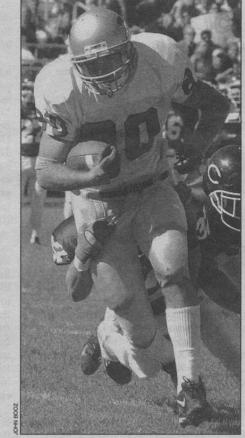
"It's a great accomplishment, and it hasn't really sunk in yet," Duesing said. "It's still hard to believe that I accomplished an achievement like that. I never imagined something like this happening coming in as a freshman.

"It's a testament to how hard all my teammates worked in the last four years to make me a better player."

Duesing, who ranks first in WUSTL history in pass receptions and receiving yards, finished his collegiate career ranked third in Division III history in receptions (287) and sixth in receiving yards (4,249).

Duesing put up totals of 1,073 receiving yards in 2002, 1,029 in 2003 and 1,011 in 2004. As a senior co-captain, Duesing saved his best year for last, posting a school-record 75 catches for 1,136 yards and 10 touchdowns.

'This is just as much my



The Bears' Brad Duesing notched more than 1,000 receiving yards in all four seasons here, becoming just the second player in NCAA history — Division I, II or III — to record four consecutive 1,000-yard receiving seasons. "It's a testament to how hard all my teammates worked in the last four years to make me a better player," the team cocaptain says.

teammates' record as it is mine," Duesing said.

"I appreciate Coach (Larry) Kindbom for giving me an oppor-tunity to play college football, and I've loved the past four years here at Washington University."

Consistency was key, though

it's easier said than done. In Duesing's four years on the Hilltop Campus, he had the task of working with five starting quarterbacks and three offensive coordinators. He also started in all of the Bears' 40 games over that stretch.

"That, to me, is the most impressive thing about the record," Kindbom said. "Each coordinator has his own needs in practice and at the game, and no two quarterbacks threw the ball the same. Brad had to deal with that since he's been here. The stats speak for themselves."

Duesing, on the other hand, feels nothing changed throughout his four years here.

"The offense has remained basically the same," said Duesing, who played at St. Xavier High School in Cincinnati. "The quarterbacks we have had have all shared similar attributes, and the plays we run haven't been too different."

A political science major in Arts & Sciences, Duesing isn't sure yet of his post-college plans. They could include law school or even football.

"If the opportunity to keep playing football arises, I'll look into it," said Duesing, who is 6-foot-3, 210 pounds. "I worked out for the Cleveland Browns last year and did some tests for a scout, but right now I'm just looking for a job and thinking about law school."

With the win, Washington U. caps the season with a 6-4 overall record and clinches its 13thstraight winning season.

The Bears scored 35 unanswered points after trailing 24-7 with 10:34 left in the second quarter. Washington U.'s defense held the Panthers to 72 yards on 33 plays in the second half.

Junior quarterback Nick Henry threw for a career-high 337 yards on 29-of-40 passing with four touchdowns. Junior running back DaRonne Jenkins led the ground attack with 22 carries for 74 yards and two touchdowns.

Swimmers, divers finish middle of pack

The men's swimming and diving team took third and the women placed fourth at the University of Chicago Maroon Invitational on Nov. 11-12 in the Windy City.

The WUSTL men won six events, led by senior Eric Triebe, who won the 50-yard freestyle. He also helped the 200-medley and 400-free relay squads to first place. Freshman Kevin Leckey won the 400-yard individual medley, while sophomore Ross Vimr won the 200 freestyle. Freshman Julian Beattie also took home the 200-yard breaststroke

The Bears women won eight individual titles, highlighted by sophomore Meredith Nordbrock, who won the 100 backstroke, missing an NCAA "B" cut by .68 seconds. She also helped the 200medley and 400-free relay squads to victory.

Senior Jenny Scott won the 200-yard freestyle, while sophomore Jennifer Yu took first place in the 400 individual medley. Freshman Kelly Kono won the 1,650 free title, while sophomore Priya Srikanth won both the oneand three-meter diving titles.

Rizzo, Liefer make **ESPN** All-District

Seniors Joe Rizzo (football) and Kara Liefer (volleyball) were named to the ESPN The Magazine College Division Academic All-District VII Team as selected by the College Sports Informa-tion Directors of America.

Rizzo, a member of the firstteam, led the Bears with six interceptions and 16 passes defended. A finance and accounting major in the Olin School of Business, he was named to the 2003, 2004 and 2005 UAA All-Academic teams.

Liefer was named to the third team. A mathematics major in Arts & Sciences, she was named to the 2003, 2004 and 2005 UAA All-Academic teams.

number in a single season (also achieved in 1992).

Seniors Megan Houck and Liefer were each named to the first

Houck earned first-team honors for the first time (she earned third-team accolades last season).

Liefer, a three-time (two firstteam nods) AVCA All-America selection, leads the UAA in assists per game (11.92).

Smith was named to the second

On the Web

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

team as a dominant force on the right side. Smith, a first-team all-Central Region honoree, has a team-season-high 354 kills (3.44 per game) and is hitting .381. Spencer earned third-team honors.

Walk garnered honorable-

Association leader in blocks per game (1.54).

mention honors at middle hitter.

Walk is the University Athletic

Football team bumps Greenville, closes 6-4

Senior wide receiver Brad Duesing scored two touchdowns to lead the football team to a 42-24 win at Greenville College

Fiction writer Heim to read for **Writing Program Reading Series**

Fiction writer Scott Heim will read from his work at 8 p.m. Dec. 1 in Hurst Lounge, Duncker Hall, Room 201, for the Writing Program Reading Series.

Heim is the author of the novel Mysterious Skin (1995), recently adapted to film by director Gregg Araki. The story is set in the small town of Hutchinson, Kan., where two boys on the same Little League team unknowingly share struggles and obsession sex, loyalty, first love and aliens that direct their adolescent lives.

"With uncommon poetry and clarity, Scott Heim paints a devastating portrait of a new lost generation," noted essayist and screenwriter Connie May Fowler. "Mysterious Skin will haunt and enrage you. I am awestruck by Heim's courage. Read this book."

Heim's other books include the novel In Awe (1997), winner of

the Firecracker Alternative Book Award for fiction; and a collection of poetry, Saved From Drowning (1993). Heim is working on a third novel, We Dis-

His writing has appeared in The Village Voice, The Advocate, Paper and numerous anthologies. Major honors include a fellowship from the London Arts Board and a Sundance Screenwriters Lab fellowship for his adaptation of Mysterious Skin.

Born in Hutchinson, Heim earned bachelor's degrees in English and in art history and a master's in English literature from the University of Kansas. He earned a master of fine arts degree in writing from Columbia University.

The reading is free and open to the public. For more information, call 935-7130.



Lighting up the night WUSTL engineering students, including junior Garrett Eardley (above), worked hundreds of hours to create a large-scale, computer-controlled dance floor, which boasts 1,536 long-lasting and low-power-consuming LEDs that light in 4,096 different colors. The students used substances as common as aluminum foil to achieve special effects for the project, which was under the direction of the University's chapter of the Institute of Electrical and Electronics Engineers. The software portion of the project was completed as part of a capstone course in software engineering. The dance floor was put to the ultimate test on the evening of Nov. 12, when it was used at the Engineering Student Council's annual dance party, titled "Vertigo."

Has directed the Lamar Dodd School since 1997

- from Page 1

Ph.D., the Ralph E. Morrow Distinguished University Professor and chair of the Department of Anthropology in Arts & Sciences.

Colangelo will oversee the Sam Fox School's four academic units — the College of Art, the College of Architecture, the Graduate School of Art and the Graduate School of Architecture & Urban Design — as well as the Mildred Lane Kemper Art Museum, home to one of the nation's finest university collections of modern art.

In addition, Colangelo will serve as a member of the University Council and as the E. Desmond Lee Professor for Community Collaboration in the Arts.

"This is just an amazing opportunity, and I am absolutely thrilled to join Washington University as first dean of the Sam Fox School," Colangelo said. "This new structure presents tremendous opportunities for innovative collaboration and to become an international center for creative activity to address, explore and contemplate the challenges of contemporary design in the 21st century.

"Two beautiful new Fumihiko Maki buildings; nationally ranked architecture and art programs; and one of the very finest university art collections and galleries in the country — the combination and potential are extraordinary.

"The Sam Fox School will strive to be a leader and one of the most unique and dynamic schools of design and visual arts in the world. I am honored to join its faculty in a leadership role."

The current deans of Architecture and Art will report to

Colangelo, who in turn will report directly to Wrighton. In addition, Colangelo will chair the Sam Fox School Executive Committee, comprising the deans of Architecture and of Art; the director of the Kemper Art Museum; and leaders of the Department of Art History & Archaeology in Arts & Sciences and the Kenneth and Nancy Kranzberg Information Center.

"I think we have succeeded in hiring one of the most talented arts administrators in the country," said Jerry Sincoff, dean of Architecture and a member of the advisory committee. "Under Carmon's leadership, the Lamar Dodd School has completed design and planning for a new \$40 million campus that will unite its arts and design programs in a single location.

"I am certain he will bring that same energy and collaborative approach to St. Louis."

Jeff Pike, dean of Art and current chair of the Sam Fox School Executive Committee, and Sabine Eckmann, director of the Kemper Art Museum, also served on the advisory committee.

Eckmann noted that Colangelo was founding director of Georgia's Ideas for Creative Exploration, which promotes "innovative, multidisciplinary projects and advanced research in the arts through publications, performances and exhibitions."

Pike added, "At Georgia, Carmon effectively built new interdisciplinary initiatives while strengthening both the faculty and the graduate program. We look forward to working with him."

About Carmon Colangelo

Colangelo is a widely exhibited artist known for large mixed-media prints that combine digital and traditional processes.

Over the past decade, Colan-

gelo's work has been featured in 15 solo shows and dozens of group exhibitions in Argentina, Canada, England, Italy, Korea, Mexico, Puerto Rico and across the United States. His work has been collected by many of the nation's leading museums, including the National Museum of American Art in Washington, D.C., the Whitney Museum of American Art in New York and the Fogg Art Museum at Harvard University.

Born in Toronto, Colangelo earned a bachelor of fine arts degree in printmaking and painting from the University of Windsor in Ontario in 1981 and a master of fine arts degree in printmaking from Louisiana State University in 1983.

From 1984-1996, Colangelo headed the printmaking department at West Virginia University and was named chair of the Division of Art in 1993.

In 1997, he became director of the Lamar Dodd School, which encompasses approximately 1,000 undergraduate and 90 graduate art majors. He was named a distinguished research professor in 2003.

Under Colangelo's direction, the Lamar Dodd School started a significant visiting artist scholar series; recruited more than two dozen full-time faculty and staff positions; increased graduate and teaching assistantships by more than 50 percent; and renovated the recently named John D. Kehoe Center, a 13th-century monastery in Cortona, Italy, for its study abroad program

its study abroad program.

U.S. News & World Report
ranks the school's M.F.A. program among the top 21 in the
nation and the printmaking program among the top three.

Colangelo and his wife, Susan, have three daughters: Jessica, 19, Ashley, 17, and Chelsea, 11.

Genome

Maize cultivar B73 to be sequenced - from Page 1

in DNA, while studying maize in the 1940s and '50s.

"Transposons are essential to allowing a genome to evolve and develop new genes and new functions," Wilson said. "Much of what we understand about genome structure and evolution we have learned from maize and from the work of McClintock and people who followed her."

Wilson noted that St. Louis has a rich tradition of leadership in agriculture and botanical research, including the headquarters of Monsanto Corp., the Missouri Botanical Garden and the Donald Danforth Plant Science Center. The University's Division of Biological and Biomedical Sciences includes a graduate program in plant biology with connections to the botanical garden and the Danforth Center.

"It's exciting to see this contribution to agriculture come from the St. Louis community," said Robert T. Fraley, senior vice president and chief technology officer for Monsanto. "Completion of the maize genome will allow agricultural researchers to identify new genes responsible for important traits like yield and drought tolerance, creating opportunities to bring additional value to farmers around the world."

The maize genome will allow botanists to more precisely track the intermingling of genes in hybrid species created to combine advantageous traits. Farmers and botanists currently do this by crossbreeding, sowing the resulting plants, looking for the appearance of those desirable traits in one or more of the resulting cultivars (the plant's world's equivalent to a breed or a strain), and going back to the greenhouse for more crossbreeding.

The genome should make it much more practical to look directly at the DNA of new cultivars to see if they have inherited the desired traits.

Scientists at the GSC will sequence a maize cultivar known as B73, commonly used in maize genetics research.

"What we learn from maize will be applicable to other plant genomes," Wilson said. "If we successfully work through maize with state-of-the-art sequencing technology and drive the sequencing costs down, then it's going to be easy to think about sequencing other important crops like soybean and sorghum on the heels of maize.

"Just like the human and mammalian genomes, having other plant genomes sequenced makes the genome that you're currently working on easier to understand and more useful."

Collaborators who will consult on or contribute to the GSC's maize genome work include:

• Rod Wing at the University

• W. Richard McCombie, Robert Martienssen, Doreen Ware and Lincoln Stein at Cold Spring Harbor Laboratory; and

• Patrick Schnable and Srinivas Aluru at Iowa State University.

The second maize genome sequencing grant, \$2.5 million, went to a collaboration of the University of California, Berkeley; the Department of Energy's Genome Institute; the University of Georgia; and Stanford University.

These scientists will sequence a chromosome from a different maize cultivar.

Teeth

Data from them has 'powerful' potential
- from Page 1

"My whole point was to take an isolated tooth and figure out what dinosaur it belonged to," Smith said.

"The questions I'm interested in are different than, 'What did this thing eat?' I'm interested more in teeth as tools for dinosaur identification, rather than the teeth as teeth themselves."

Teeth as hardy identifiers

People like teeth. The same mineral that will soon help us chew our way to Thanksgiving bliss allows paleontologists like Smith to study a time period so far removed from our own that traces of bones and enamel are among the only clues to the past.

Mesozoic-aged dinosaurs, living between 65 million and 225 million years ago, are referred to as polyphyodont animals because they continually shed and replaced teeth throughout their lives. Tooth replacement introduces the hardest and most resilient substance in the vertebrate body, enamel, into the local environment many times over as old teeth are lost and fall from the mouths of their owners into streams and onto the forest floor.

After countless tooth replacements and millions of years of sedimentation, Smith and his colleagues have uncovered an ample data set of preserved dinosaur enamel: Smith's Rosetta stone of theropod classification.

"The problem is that theropod teeth are simple enough that everyone has ignored them for the last 200 years," Smith said. He said that the simple shapes of theropod teeth have complicated previ-

ous rigorous attempts to use them for classification.

The mathematical tedium Smith claims to have spared while devising the methods was not lost on tooth examination: Smith collected measurements and curvature data from about 2,000 teeth, scrutinizing dinosaur chops as a dentist would a root canal.

Thousands of measurements ultimately boiled down into a data set of just fewer than 300 usable teeth.

The data set comprises measurements of teeth from genera that are known with certainty; it thus forms a standard of comparison against which unknown teeth can be compared.

Smith then ran statistics on the database to correlate the shapes of unknown teeth with the most similar tooth of known origin. During a test of the methods, most of the time the model worked, correctly identifying known, and even similar-looking teeth as the correct genus.

"I've created the beginnings of a standard of comparison; a data set with teeth that we know where they came from, against which to compare isolated teeth," Smith said. "That's basically all I've

Increasing the data set

He said the model, although functional, isn't without its weaknesses. To properly correlate a tooth with a species, the species that the tooth belongs to must be represented in the data set; otherwise, the analysis will try to match the tooth with the species that most resembles the unknown.

"So now I'm working on making the method better and increasing the size of the data set," Smith said.

Dinosaur identification is critical for paleontologists trying to accurately reconstruct the Mesozoic Period. Teeth can reveal dinosaur eating habits and biology if the tooth is associated with its rightful owner.

"We're taking a potential data set, that is isolated teeth, that has the potential to be really powerful," Smith said. "Until now, the data have largely been overlooked, but we're trying to make use of them.

"And it looks like it's working. Which is only really significant because everybody said it wouldn't."

Eden

Both schools 'share a common belief' - from Page 1

Alumni Award and a graduate of Eden Seminary, said the dual degree program "provides the opportunity for the students and schools to make valuable connections"

"From counseling to program planning, my social work skills have helped enormously in my work as a minister," said Bumb, pastor of Pilgrim Congregational United Church of Christ.

Current social work doctoral student and Eden graduate Kirk A. Foster came to the M.S.W. program because he was asked to develop community outreach programs for his United Church of Christ congregation. He knew the master's degree would give him the necessary skills.

"For centuries, the church has been involved in delivering muchneeded social services not only to its members, but also to the wider community," Foster said.

"Social work has its roots in

religious movements, and the new partnership between the School of Social Work and Eden Seminary honors that historic tie. These graduates will be uniquely positioned to speak the language of and understand the inherent challenges in a diverse and fluid social service delivery milieu."

Graduates of the M.S.W./
M.Div. program will be prepared to engage in leadership and program development in religious-based social services, oversee service delivery in religious settings and serve as advocates for social justice.

Students admitted into this program will spend three semesters at the School of Social Work and five semesters at Eden.

The M.S.W./M.A.P.S. program is most appropriate for those students interested in youth ministry, church administration, pastoral care, social justice ministry, health care, lay ministry, and therapeutic and counseling services in religious-based settings.

This program requires three semesters at the School of Social Work and three semesters at Eden.

"These dual-degree options formalize a relationship that has existed for some time," said the Rev. David M. Greenhaw, president of Eden Seminary.

"Both of our schools share a common belief that the world isn't as it should be and a commitment to creating positive change."

Beginning this spring, two Roblee Foundation George Warren Brown School of Social Work-Eden Theological Seminary Scholarships, funded through a grant from the Joseph H. and Florence A. Roblee Foundation, will be available for students in the new dual-degree program.

For more information, call the School of Social Work's admissions office at 935-6676.

Campus Watch

The following incidents were reported to University Police **Nov. 9-15**. Readers with information that could assist in investigating these incidents are urged to call 935-5555. This information is provided as a public service to promote safety awareness and is available on the University Police Web site at *police.wustl.edu*.

Nov. 12

7:10 p.m. — A person's vehicle was entered and approximately. \$2,300 in stereo and clothing was taken from the car, which was parked on the main level of the Millbrook Parking Garage. An investigation is continuing.

Nov. 15

10:35 p.m. — A person stated that she left her purse in Hurst Lounge in Duncker Hall, and when she returned, her purse was missing.

Additionally, University Police responded to four larcenies, three reports of property damage, two reports of lost articles and one report each of assault, alarm, auto accident, parking violation, judicial violation and disturbance.

Nov. 18, 2005 7

Notables

Of note

Several School of Medicine faculty members were honored at the St. Louis Business Journal's annual Health-Care Heroes awards program. **Philip R. Dodge**, M.D., professor emeritus of pediatrics and of neurology, was co-winner of the lifetime achievement award. **John C. Morris**, M.D., the Friedman Distinguished Professor of Neurology and director of the Alzheimer's Disease Research Center, won the award for innovation. James P. Crane, M.D., associate vice chancellor for clinical affairs, chief executive officer of the faculty practice plan, professor of radiology and of obstetrics, and associate professor of genetics, was a finalist for the award for public policy. Ira J. Kodner, the Solon and Bettie Gershman Professor of Surgery, was a finalist for the innovation award. ...

James Hsieh, M.D., Ph.D.,

assistant professor of medicine, has received a four-year, \$557,776 grant from the National Cancer Institute for research titled "Genetic and Biochemical Analyses of MLL Cleavage.".

Zsolt Urban, Ph.D., assistant professor of pediatrics, has received a two-year, \$535,500 grant from the National Heart, Lung, and Blood Institute for research titled "Elastin Gene Mutations: Mechanisms Causing SVAS and ADCL."

Carolyn J. Anderson, Ph.D., associate professor of radiology, has received a five-year, \$444,609 grant from the National Institute of General Medical Sciences for a project titled "Curriculum for Imaging Sciences at Washington University."

Jane M. Garbutt, M.D., research assistant professor of medicine, has received a two-year, \$440,211 grant from the Agency for Healthcare Research and Quality for research titled "Using the Telephone to Improve Care in Childhood Asthma."

Linda B. Cottler, Ph.D., professor of epidemiology in psychiatry, has received a two-year, \$356,326 grant from the National Institute of Drug Abuse for research titled "Deconstructing HIV Intervention for Female Offenders."

Sheila A. Stewart, M.D., assistant professor of cell biology and physiology, has received a twoyear, \$344,250 grant from the National Institute on Aging for research titled "Cellular Lifespan and the Telomere Proteome." ...

Jason Lewis, Ph.D., assistant professor of radiology, has received a three-year, \$344,250 grant from the USA Med Research ACQ Activity for research titled "Deli-

Corrections

Nov. 11 issue, Page 7: In an "Of note" item about a fouryear, \$750,000 Information Technology Research grant from the National Science Foundation, an incorrect affiliation was published with Mark A. Franklin, Ph.D. He is the Hugo F. and Ina Champ Urbauer Professor of Engineering in the Department of Computer Science and Engineering. In addition, James H. Buckley, Ph.D., professor of physics in Arts & Sciences, was incorrectly omitted as a collaborator.

Nov. 11 issue, Page 8: A labrum surgery patient was misidentified in a photo caption. Her name is Dominique

Davis. The Record regrets the errors.



Scholarships help address community issues Dirk Killen, assistant dean and academic coordinator in the College of Arts & Sciences, presents senior Laura Vilines with a plaque recognizing her as the winner of the 2005 Stern Summer Scholarship during a ceremony Nov. 4 at the Alumni House. Vilines used her scholarship to organize and run the Appalachian Arts Project, three weeklong day camps for Appalachian children focusing on theater, music, dance and visual arts. Applications for the 2006 Stern Summer Scholarship, which provides \$3,000 for one Arts & Sciences undergraduate to spend the summer pursuing an innovative idea addressing a community of the summer pursuing an innovative idea addressing a community of the summer pursuing an innovative idea addressing a community of the summer pursuing an innovative idea addressing a community of the summer pursuing an innovative idea addressing a community of the summer pursuing an innovative idea addressing a community of the summer pursuing an innovative idea addressing a community of the summer pursuing an innovative idea addressing a community of the summer pursuing an innovative idea addressing a community of the summer pursuing an innovative idea addressing a community of the summer pursuing an innovative idea addressing a community of the summer pursuing an innovative idea addressing a community of the summer pursuing an innovative idea addressing a community of the summer pursuing an innovative idea addressing a community of the summer pursuing an innovative idea addressing a community of the summer pursuing an innovative idea addressing a community of the summer pursuing an innovative idea addressing a community of the summer pursuing an innovative idea addressing a community of the summer pursuing an innovative idea addressing a community of the summer pursuing an innovative idea addressing a community of the summer pursuing an innovative idea addressing a community of the summer pursuing an innovative idea addressing a community of the summer pursuing an innovative idea addressing a community of the summer pursuing an innovative idea addressing a community of the summer pursuing and the summer pursuing an innovative idea addressing a community of the summer pursuing an innovative idea addressing a community of the summer pursuing and the summer pursuing and a community of the summer pursuing and a community of the summ nity issue, are being accepted until Feb. 3. Applications for the \$5,000 Kaldi's St. Louis Service Scholarship, which provides funding for an undergraduate student to develop an innovative and sustainable community project in the St. Louis region, are also due Feb. 3. For more information and specific scholarship guidelines, go online to communityservice.wustl.edu/stern or communityservice.wustl.edu/kaldis.

neating the Effects of Tumor Therapies on Prostate Cancer Using Small Animal Imaging Techno-

Michael Sherraden, Ph.D., the Benjamin E. Youngdahl Professor of Social Development in social work, has received a one-year, \$200,000 grant from the Ford Foundation for the project titled "Core Support for the Center for Social Development's Programs on Asset Building for Social and Economic Development." ..

Victoria J. Fraser, M.D., pro-fessor of medicine, has received a two-year, \$536,602 grant from the National Center for Infectious Diseases for research titled "Outcomes and Costs of Antibiotic Resistant Blood Infection." ...

Zhengjun Zhang, PhD., assistant professor of mathematics in Arts & Sciences, has received a three-year, \$102,000 grant from the National Science Foundation for research titled "Quotient Correlation, Nonlinear Dependence, and Extreme Dependence Modeling." ...

John E. McCarthy, Ph.D., professor of mathematics in Arts & Sciences, has received a five-year, \$273,480 grant from the National Science Foundation for research titled "Operator Theory and Complex Geometry." ..

Stuart McDaniel, post-doctoral research scholar in biology, has received a three-year, \$134,340 grant from the National Institute of General Medical Sciences for research titled "The Molecular Basis of Reproductive Isolation."

Amanda Moor McBride, Ph.D., assistant professor of social work, has received a three-year, \$1,500,000 grant from the Ford Foundation for "Core Support for the Global Service Institute." ...

Nada A. Abumrad, Ph.D., professor of medicine, has received a two-year, \$654,076 grant from the

To submit Notables for publication in the Record, e-mail items to Andy Clendennen at andyc@wustl.edu or fax to 935-4259.

National Institute of Diabetes and Digestive and Kidney Diseases for research titled "CD36 and Intestinal Fat Absorption.".

Kenneth S. Polonsky, M.D., the Busch Professor of Medicine, has received a two-year, \$585,182 grant from the National Center for Complementary & Alternative Medicine for research titled "A Clinical Trial of Ginseng for Glu-

cose Intolerance." ...
Ross L. Cagan, Ph.D., professor of molecular biology and pharmacology, has received a twoyear, \$306,000 grant from the National Institute of Diabetes and Digestive and Kidney Diseases for research titled "Drosophila Screens for Diabetes and Glucose Toxicity.".

Robert O. Heuckeroth, M.D., assistant professor of pediatrics, has received a two-year, \$306,000 grant from the National Institute of Diabetes and Digestive and Kidney Diseases for research titled 'Proteomics of Biliary Atresia." ...

Mario Schootman, Ph.D., assistant professor of medicine, has received a two-year, \$279,500 grant from the National Institute of Diabetes and Digestive and Kidney Diseases for research titled "Geography of Amputations Among African-Americans." ...

Ming You, M.D., Ph.D., professor of surgery, has received a one-year, \$256,595 grant from the Medical College of Ohio for research titled "Preclinical in Vitro & in Vivo Screening Assays for Cancer Preventive Agent Development WA#3."

Kelvin A. Yamada, M.D., associate professor of neurology, has received a one-year, \$105,488 grant from the Juvenile Diabetes Research Foundation International for research titled "Hypoglycemiainduced Synaptic Dysfunction in the Developing Brain."

John C. Morris, M.D., the Harvey A. and Dorismae Hacker Friedman Professor of Neurology, has received a three-year, \$100,000 grant from the Dana Foundation for research titled "PET Ameloid Imaging in Nondemented Elderly to Evaluate Alzheimer Risk." ...

Keith M. Rich, M.D., associate professor of neurological surgery,

has received a two-year, \$90,000 grant from the Barnes-Jewish Hospital Foundation for research titled "Role of Tissue Transglutaminase 2 Inhibitors as Radiosensitizers in the Treatment of Brain Tumors.".

Barry A. Hong, Ph.D., professor of psychiatry, has received a one-year, \$60,000 grant from the University of Missouri for research titled "Comparison of ESRD Card, Prevention & Satisfaction in States With and Without Kidney Programs." ...

Amy Waterman, Ph.D., assistant professor of medicine, has received a one-year, \$39,000 grant from the University of Missouri for research titled "Increasing Dialysis Patients' Interest in Living Donation Using Health Education: A Group Randomized Controlled Trial." ...

Jeanne M. Harvey, nurse practitioner, has received a twoyear, \$35,000 grant from the Lance Armstrong Foundation. ...

John DiPersio, M.D., Ph.D., the Lewis T. and Rosalind B. Apple Professor of Medicine, has received a one-year, \$21,918 grant from Northwestern University for research titled "Phase

I & II Clinical Trails of Cancer Chemopreventive Agents."

Terence M. Mykatyn, M.D., instructor in surgery (plastic and reconstructive surgery), received a one-year, \$4,000 grant from the Plastic Surgery Education Foundation for research titled "Embryonic Stem Cells Preserve the Neuromuscular Junction." ...

Dennis Barbour, Ph.D., assistant professor of biomedical engineering, and Shelly Sakiyama-Elbert, Ph.D., the Joseph and Florence Farrow Assistant Professor of Biomedical Engineering, have received two-year, \$220,000 Early Career Translational Research Awards from the Wallace H. Coulter Foundation. Barbour's award is for research titled "Improvement of Noisy Signal Representation in Auditory Prostheses via Biologically Inspired Spectral Contrast Shaping"; Sakiyama-Elbert's award is for her study, "Rationally Designed Delivery Systems for Nerve In-

Igor Efimov, Ph.D., the Lucy and Stanley Lopata Associate Professor of Biomedical Engineering, has received a one-year, \$100,000 research contract from Medtronic Inc., for his study 'Understanding Defibrillation Mechanisms Using Optical

Mapping." ...

Jin-Yu Shao, Ph.D., associate professor and associate chair of biomedical engineering, has received a three-year, \$693,110 extension from the National Institutes of Health for his study, "A Novel Technique of Imposing Femtonewton Forces.".

Milorad P. Dudukovic, Ph.D., chair of chemical engineering, the Laura and William Jens Professor of Environmental Engineering and director of the Chemical Reaction Engineering Laboratory, has received the American Institute of Chemical Engineering 2005 Fuels and Petrochemicals Division Award "in recognition of outstanding technological contributions to the advancement of our industry." He was presented the award at the AIChE Spring National Meeting, in Atlanta.

In print

Carl M. Bender, Ph.D., professor of physics in Arts & Sciences, is serving as editor-in-chief of the Institute of Physics (IOP) Journal of Physics A: Mathematical and General. He is featured this month in "60 Seconds With ... ," an interview-style Q&A segment on the IOP Publishing Web site. "60 Seconds With ... " offers an informal and personal look at people who are shaping the physics community. For Bender's interview, go online to journals.iop.org/sixty/58.

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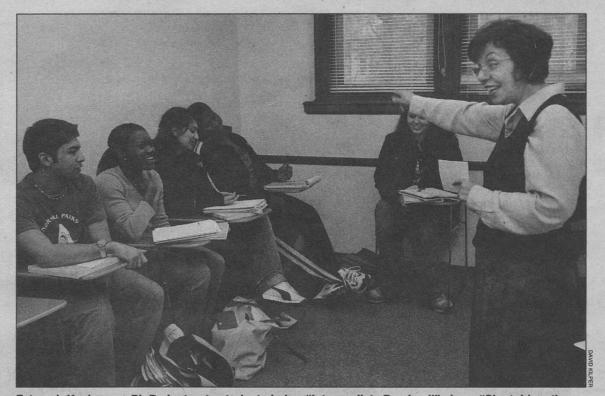
Washington People

or Fatemeh Keshavarz,
Ph.D., associate professor
of Persian and of comparative literature, both in
Arts & Sciences, poetry is
much more than an academic discipline. It is a profoundly personal experience that requires both
the poet and the reader to be fully
involved in its consummation.

"Poetry is the magic we perform with language," she says. "It is teaching our minds to enter a world of play in which the parameters are set by our imagination. When we truly read a poem, we participate in the creation of a world that comes into existence during our reading. The magic of poetry is not only presented to us, but partially performed by us."

but partially performed by us."
As chair of the Department of Asian and Near Eastern Languages & Literatures in Arts & Sciences, she invites students and scholars to explore a mosaic of words and meanings that is as colorful and varied as the cultures, ethnicities and languages taught in the department.

Despite nearly two decades here in St. Louis, she continues to



Fatemeh Keshavarz, Ph.D., instructs students in her "Intermediate Persian II" class. "She told us the Persian language was easy to remember and hard to forget, and that's how I think of her now," says former student Anne Craver. "She's one of the best teachers I've had in my many years of education. She's easy to remember and hard to forget."

'Easy to remember, hard to forget'

Fatemeh Keshavarz explores a colorful mosaic of cultures, ethnicities and languages

Fatemeh Keshavarz

University titles: Associate professor of Persian and of comparative literature, and chair of the Department of Asian and Near Eastern Languages & Literatures, all in Arts & Sciences

Degrees: B.S., Persian language and literature (1976), and M.L.S., library and information science (1979), Shiraz University, Iran; Ph.D., Near Eastern and Persian studies, London University, 1985

Family: Husband Ahmet T. Karamustafa, Ph.D., associate professor of history and of religious studies, both in Arts & Sciences; daughter Atefeh, an architect in Chicago; daughter Ayla; and son Ali, high-school students in St. Louis

Hobbies: Runs 3-4 miles daily; loves baking, spending time with friends

draw on lessons learned as a child in Shiraz, the southwest Iranian city where she was born and raised.

"All across Iran, especially in Shiraz, the lives of ordinary people revolve around love of poetry and literature," Keshavarz says. "Where I grew up, poets don't live just in books. They become very influential figures in your life."

Shiraz has always been a cultural center. Known for lush rose gardens and groves of citrus and cypress trees, it was home to two of Islam's greatest poets: Hafez (1324-91) and Sa'di (1209-91). Their influence remains strong.

"When I was little, my mother's loving and scolding words were often quotes from popular poems by Sa'di," she recalls. "My father was my best teacher of poetry. He worked as a bank accountant, but was very well-read and had a great love of books. My literary exchanges with him were a big part of my early education."

Now a well-regarded literary critic, she specializes in classical and modern Persian poetry and teaches courses in Persian language, comparative literature and other interdisciplinary topics, such as family and gender issues in Islamic culture.

"Keshavarz is a multitalent," says Gerhild Scholz Williams, Ph.D., chair of the Department of Germanic Languages & Literatures in Arts & Sciences and the Barbara Schapps Thomas and

David M. Thomas Professor in the Humanities. "She's a gifted poet and translator of poetry, a scholar of literature, an effective and imaginative teacher, and an energetic, well-organized and congenial administrator."

Robert E. Hegel, Ph.D., professor of Chinese and of comparative literature, both in Arts & Sciences, describes Keshavarz as an extremely capable leader known for an insightful approach and inexhaustible good humor.

"Her laughter frequently rings down the hallway," Hegel says.
"Her affection for her students and her colleagues is obvious in all that she does."

Former students echo those sentiments.

"Professor Keshavarz is not only an erudite scholar and peerless instructor, she also is the very embodiment of dedication," says Omid Ghaemmaghami, who is now pursuing a doctorate at University of Toronto. "She liberally shared her wisdom, constructive criticism and guidance, always in a manner that sought to encourage."

Anne Craver, who earned a doctorate in comparative literature with French, Persian and Arabic languages here in 2000, has known Keshavarz since taking her Persian course in 1988.

"She told us the Persian language was easy to remember and hard to forget, and that's how I think of her now," Craver says. "She's one of the best teachers I've had in my many years of education. She's easy to remember and hard to forget."

Keshavarz's interests, like her poetry, are constantly evolving.

"I began as a specialist in Persian literature, but worked hard to retool myself as a comparativist," she says. "Comparative literature offers a great focal point for examining particular issues addressed by different cultures, different times."

In her course "Lyrics of Mystical Love, East and West," Keshavarz explores the unique perspective that mystic poets from various traditions bring to the same abstract concepts as they share the struggle to express the inexpressible.

"In some works, the concept of silence has a connotation of emptiness or loneliness. In others, it conveys serenity or anticipation. The 12th-century Persian poet Rumi has a lot to offer on silence, but the discussion gets much richer when we bring in the views of a 20th-century writer, such as Thomas Beckett, with a totally different perspective on silence."

While much of her work involves in-depth analysis of poetry, she hopes students come away from her classes with more than a cold and empirical grasp of poetry's nuances. She strives to instill the lesson she learned as a child in Shiraz, the realization that poetry can be an essential tool for self-understanding, for shaping the very direction and quality of a lifetime.

"Washington University has such amazingly bright and excellent students. I would be disappointed if I didn't have a chance to share my work with them," she says. "Even if they don't pursue careers in the field, I want them to see literature as an ongoing and important part of their lives."

Keshavarz's own literary interest took her to Shiraz University, where she earned a bachelor's in Persian language and literature in 1976, and her first collection of poems was published.

She earned a doctorate in Near Eastern and Persian Studies from London University in 1985. While there, she met her husband, Ahmet T. Karamustafa, Ph.D., a well-regarded historian of Islam. They married and moved here in 1987 after he was offered a job at WUSTL.

Karamustafa is now an associate professor of history and of religious studies, both in Arts & Sciences. Both have taken turns as director of the University's Center for the Study of Islamic Societies and Civilizations.

Keshavarz's first daughter, Atefeh, attended the University and is now an architect in Chicago. They are raising two more children, a daughter, Ayla, 17, and a son, Ali, 15. Both are trilingual, speaking English, Turkish and Persian. The family is active in Muslim communities on and off

"As a family, we use the experience of Muslim holy days, such as fasting together at Ramadan, as a way to think about what's important in life," she says. "My identity as a Muslim, and my spirituality in a general sense, are very important to me."

Music is an integral part of the spiritual experience, a way to keep connected with the inner rhythm. Keshavarz collaborates with the Liän Ensemble, a Los Angelesbased world music group that often invites her to recite lyric poetry, such as Rumi's ghazals, as they perform Persian music. Designed to showcase the artistic interplay of poetry and music, the performances have filled 1,200-

seat auditoriums.

Rumi, a towering figure in the Persian-speaking world, was littleknown in America until a couple decades ago when his lyric verses became available in translation. He is now a bestselling poet in English translations.

Keshavarz is one of few scholars to focus on the aesthetic and poetic dimensions of Rumi's love lyrics. Her book, Reading Mystical Lyric: The Case of Jalal al-Din Rumi, now available in paperback, is a popular text for courses in Persian literature, Islamic mysticism and mystical poetry.

Her latest book, Recite in the Name of the Red Rose, scheduled to be published in the spring, is a study of the equally diverse and colorful world of contemporary Persian literature.

Americans who think of modern Iran as a world of upheaval, revolution and hostage-taking would be surprised, she suggests, to know that the nation is home to many fine 20th-century poets who have devoted themselves to writing for the sake of art, individualism and the re-envisioning of self.

Jack Renard, a Saint Louis University professor who has followed Keshavarz's work, credits her with two great gifts: "an unfailing sense of fairness and justice, coupled with a keen sensitivity to the countless ways in which cultural diversity enriches our world."

These gifts, says Renard, suffuse every page of another book that Keshavarz is now working on, a collection of personal essays.

Since 9-11, Keshavarz often is called upon to lead community talks on issues related to Islam, especially the changing role of Muslim women.

"Muslim women are winning economic, political and family rights under varied political systems that use Islamic law," Keshavarz observes. "There are many women's movements that combine a feminist perspective with core tenets of the Muslim faith.

"I would like to see more changes in Iran. But I am hopeful," she adds. "Iranian women have been a vital force in social change."

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Fatemeh Keshavarz and husband Ahmet Karamustafa have three children. One is in Chicago, while Ali (left) and Ayla are in high school.

Shiraz

Held up to gods in the palm of a giant's hands

A rare handcrafted marble cup brimming with sunshine

Defined at the outer edges with tall Cyprus trees That line up at dawn reverently

To interpret the horizons in their meticulous green thoughts
My city is that cup of sunshine I

can drink to the last drop

And be thirsty for more.

Fatemeh Keshavarz (2000)