Farrells, Sheldens receive prestigious Brookings Award

BY BARBARA REA

David C. and Betty Farrell and Russell D. and Mary B. Shelden received the Robert S. Brookings Award for their devotion and service to the University and for building a bridge between the University and the region. The Board of Trustees presented each couple with the prestigious award at the Nov. 4 annual Founders Day ceremony.

David C. and Betty Farrell

The Farrells are longtime benefactors who have given countless hours in service to the University, most notably the School of Medicine.

Their leadership gift for a student center and educational facility on the Medical Campus turned the dream into a reality: In 2005, the community celebrated the grand opening of the Farrell Learning and Teaching Center.

In addition, the Farrells, in partnership with the former May Department Stores Company, established the David C., and Betty Farrell Professorship of Medicine in the John Miliken Department of Medicine, held by Stuart A. Kornfeld, M.D.

Their generosity is felt University-wide, as Life Members of The Brooklands Circle of the William Greenleaf Elliot Society.

David Farrell, an emeritus trustee, serves on the Medical School National Council as well as the Community Advisory Board for the Siteman Cancer Center.

His retirement in 1998 capped a lifelong career devoted to the May Company. He joined Kaufmann’s, the company’s Pittsburgh-based department store, in 1956 as a buyer and worked his way up through the ranks, becoming president of Kaufmann’s, as well as vice president of May, in 1969.

His ascent within the May Company is just as impressive. He was elected a director in 1974 and named president and chief operating officer the following year. In 1979, he was named chief executive officer and was appointed chairman and CEO in 1983.

David Farrell remains devoted to the community in a number of ways and has led in many roles for cultural organizations such as the Saint Louis Art Museum.

Unusual drug mixture inhibits tumors in mice

BY GWIN ERICSON

An experimental anti-cancer drug that was once considered a dud, a Parkinson’s disease medication and a drug ordinarily used to reverse the effect of sedatives, in research conducted at the School of Medicine, the unusual mixture inhibited the growth of aggressive prostate tumors in laboratory mice.

Although their drug choices may seem capricious, the researchers weren’t randomly pulling drugs from their shelves.

They made their discovery using sophisticated methods for delving into the unique metabolism of cancer.

WUSTL has ‘ringside seat on history in the making’ in China

BY NEIL SCHROEDER

Seven University administrators traveled halfway around the world in an effort to provide Chinese students the means to attend graduate schools in the United States.

The delegation flew to Shanghai last month to attend the International Graduate Scholarship Conference, which was co-hosted by the University, the China Scholarship Council and the Woodrow Wilson Foundation’s “Responsive Ph.D.” consortium.

The two-day event was attended by leaders of 20 prominent educational institutions in China, graduate deans and faculty members from 17 leading U.S. research universities in the consortium and more than 400 of China’s top college seniors. The number of U.S. universities in attendance marked an increase from last year, allowing heightened interest in attracting Chinese students.

We are privileged to have a ringside seat on history in the making here,” said Robert E. Thach, Ph.D., dean of the Graduate School of Arts & Sciences and a conference organizer. “The University is clearly a player in this arena and seen as a definite leader in China. This association will do us a lot of good for many years to come.”

At the event, Chancellor Mark S. Wrighton hosted a banquet honoring university leaders from China and the United States.

“I am very proud of the leadership Dean Thach is bringing to advance our relationships with premier universities in China and with prospective students from these institutions,” Wrighton said. “Through his efforts, Washington University has become a major leader in encouraging Chinese students to consider graduate education in the United States.”

Other WUSTL participants were Ping Wang, Ph.D., the Siegele Family Professor of Economics in Arts & Sciences and department chair; Peter."
Flex-spending open enrollment closes Nov. 30

T he Office of Human Resources has announced new enhancements to the University's flex-spending plans for active faculty and staff effective Jan. 1. The improvements include a triple-option payment method for employees' out-of-pocket health and child-care expenses and an increase in the 2007 federal child-care flexible spending plan. Employees can elect in either plan or both.

All interested employees — including those enrolled for 2006 — must enroll before the Nov. 30 deadline to ensure participation. Expenses not covered by health, dental, prescription drug or vision benefits, plus over-the-counter medications, can be reimbursed from the pre-tax health-care spending account.

Employees will have the opportunity to go online to verify their current enrollment and adjust contributions in addition to re-election payment method by e-mail or U.S. mail.

Another change to the flex-spending plans is the adoption of a grace period for incurring and actually claiming expenses. Employees can purchase time to pay in the Einsteinian general theory of relativity, in which light is deflected by the curvature of space and time. The purpose of gravitational wave research is to test relativistic theories and to test the general theory of relativity as predicted by Einstein. The importance of gravitational wave research is that these five friends and colleagues have agreed to come to St. Louis to speak at the conference. But why, it's not about me, it's about the science. I'm hoping that the attendees at the MWRM and the Sunday symposium will come away as excited about gravitational wave physics as I have been for almost 40 years.

Will joined the University's physics faculty in 1981 and served two terms as department chair. Also a member of the University's MacCormack Center for Space Sciences in Arts & Sciences, Will will examine the observational and theoretical implications of Einstein's general theory of relativity, including the application of Einstein's general theory of relativity, in which light is deflected by the curvature of space and time. The purpose of gravitational wave research is to test relativistic theories and to test the general theory of relativity as predicted by Einstein. The importance of gravitational wave research is that these five friends and colleagues have agreed to come to St. Louis to speak at the conference. But why, it's not about me, it's about the science. I'm hoping that the attendees at the MWRM and the Sunday symposium will come away as excited about gravitational wave physics as I have been for almost 40 years.

Walter McKee, Ph.D., professor of physics, is co-coordinating the 2006 MWRM. McKee bases his point on the idea of people getting together as a national or international meeting.

The MWRM, which WUSTL is hosting for the second time, and the symposium will be held from 9 a.m. to 5:30 p.m. all three days. On Nov. 17, the MWRM will be held in McMillan Café. The Nov. 18 MWRM will be held in the Lewis Library Great Room an MWRM symposium will be in Crow Hall, noon to 5 p.m.

The American Physical Society will award a $200 prize for the best poster presented by a student attending the meeting. Students who attended the MWRM in 1995 and 1997 in St. Louis are currently working at major national and international research laboratories.

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Neuroscientists awarded $14 million in 2 grants

By BETSY MILLER

Thomas Ferko, M.D., has been named director of the Division of Allergy and Pulmonary Medicine in the Department of Pediatrics.

Ferko, associate professor of pediatrics and of cell biology and physiology, will continue as director of the Pediatric Pulmonology Fellowship Program at the School of Medicine and as director of the Cystic Fibrosis Center at the School of Medicine and St. Louis Children's Hospital.

"I am truly honored by this opportunity," Ferko said. "The division has an excellent reputation in patient care, basic and clinical research and teaching. It is known to have two of the premier pediatric fellowship training programs in the nation."

"My goal is to take the division to the next level by expanding education and research efforts, especially with the advent of the Children's Discovery Institute."

The Children's Discovery Institute is a collaboration between St. Louis Children's Hospital and the medical school to fund novel research initiatives to speed cures for children's diseases.

"This Ferko was recruited in 2000 to lead our Cystic Fibrosis Center, which he has done with great distinction," said Alan L. Schwartz, M.D., the Harriet B. Spoehrer Professor and head of Pediatrics.

"While the division of Allergy and Pulmonary Medicine is already among the most robust nationwide, Tom's exceptional leadership will bring it to a new level," Schwartz said.

Ferko's research has focused on the development of cell and animal models to understand the pathogenesis of chronic inflammation and its role in respiratory diseases.

Ferko has been principal investigator on several National Institutes of Health, Cystic Fibrosis Foundation, March of Dimes and American Lung Association grants.

Ferko has been a board member of numerous specialty journals, including the Journal of Clinical Investigative Nursing, the American Journal of Critical Care Medicine, Chest and the Journal of Pediatrics.

"Getting to know you" (From left) Larry J. Shephard, M.D., executive vice chancellor for medical affairs and dean of the School of Medicine, and Diana L. Gray, M.D., associate dean for faculty affairs and professor of obstetrics and gynecology and radiology, get to know Shashikant Kulkarni, Ph.D., assistant professor of pediatrics, at the New Faculty Reception at the Missouri Botanical Garden.

"We certainly have one of the largest bases in brain and nervous system science, with more than 300 grants," Colditz said. "But what we've started to ask is whether the cell's survival also hinges on keeping the connections between brain cells working."

The opportunity to be involved in an even more active translation of research into neurodegenerative diseases, Colditz points to a variety of initiatives and the University's blueprint grant program is a complement recently funded by NIH to study the large number of established neuroscience investigators at the University.

"One of the criteria for evaluating the grant applications was the impact of the research directly funded by NIH to study the nervous system," said co-principal investigator Mark P. Goldberg, M.D., professor of neurology and chief of the Division of Neurology and director of the Hope Center. "We certainly have one of the largest bases in brain and nervous system science, with more than 300 grants."

"Scientists will use the grant funds to establish or expand seven cores, which are shared facilities that provide scientific services and processes regularly needed for research, including a core for creating viruses to alter the activity of important genes and a core for using advanced optical imaging techniques to monitor experimental research models."

Each core will be located in a different department at the medical school, creating a network potentially accessible to any scientist, clinical or basic, who studies aspects of nervous system disease and function.

"What's nice about the blueprint grant is that it allows us to do work not only at the bench with molecules, cells and animal models but also in the bedside with human patients," said co-principal investigator David M. Holtzman, M.D., the Andrew and Gertrude Jossey Professor and chair of Neurology.

The blueprint grant program is one of the first initiatives of NIH's Blueprint for Neuroscience Research. Like the broader NIH Roadmap for Medical Research, it was designed to encourage innovative approaches to scientific challenges that can foster collaboration between different research specialties.

The ultimate goal of both NIH initiatives and the University's own Biomed 21 initiative is to accelerate the transformation of laboratory insights into improved patient treatment.

Goldberg said the success of the University's blueprint grant proposal is partially attributable to pledges of additional support and funding from the School of Medicine, the Hope Center, the McDonnell Center for Higher Brain Function and the McDonnell Center for Cellular and Molecular Neurobiology.

Goldberg is principal investigator for the recently renewed stroke grant, now funded through its 17th year. Researchers have long noted that stroke leads brain cells to release a flood of excitatory neurotransmitters that can cause brain cells to self-destruct.

"The drugs that we've developed to stop these excitatory processes, which are based on mouse models, have mostly failed to work in humans," Goldberg said. "Our research program is looking at whether a key difference between mice and human brains could account for this lack of significant progress. That difference is the number of connections between brain cells."

"Scientists call the portion of the brain comprised of connections between brain cells white matter. Ten percent of the mouse brain is white matter; the human brain, in contrast, is about 50 percent white matter."

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Ferkol will lead pediatric allergy, pulmonary medicine division

By GLENN ERICKSON

Graham A. Colditz, M.D., Dr.P.H., has been named a professor and associate director of Prevention and Control at the Siteman Cancer Center. He will have overall responsibility for overseeing research, education and community outreach in cancer prevention sponsored by the University.

"I see my new position as a tremendous opportunity," said Colditz, senior statistical data analyst in the Department of Biostatistics, and Shashikant Kulkarni, Ph.D., senior statistical data analyst in the Department of Biostatistics, and Shashikant Kulkarni, Ph.D.

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Shapiro & Smith Dance will perform the premiere of Anytown, a dance-theater performance based on the music of Bruce Springsteen on Monday, Nov. 13. The performance will take place Oct. 5, 2005, at the Annenberg Center for the Performing Arts, University of Pennsylvania. The event will be free to the public.

Saturday, Nov. 11

Monday, Nov. 13


5:30 p.m. Health Science Research Workshop. "Medical Sciences Bldg., Room 103.


8:00 p.m. Board of Trustees Meeting. "Board of Trustees Meeting.

9:30 p.m. Tennis." University Events Center.

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Staged readings highlight A.E. Hotchner Festival
Four winning student plays featured Nov. 16-17 in Mallinckrodt Center

By Elam Omote

Four aspiring playwrights will present staged readings of their original works tonight and Thursday, as part of the 2006 A.E. Hotchner Playwriting Festival. Full-length and One-Act Black Box plays, a story of war and delusion by graduate student Dan Rubin. The production is titled "60 Seconds Live" and is a fast-paced tale of new manipulation by junior Nicholas Loyal. The play is called "The Tale of the Newborn" and is based on a true story of international politics.

The readings will be selected from original plays submitted in January by students University-wide. An adjudication committee made up of faculty and the student group Players will select the productions for the festival, which is sponsored by the Performing and Fine Arts Program.

The winning works were subject to an intense two-week workshop culminating in the staged readings. Visiting playwright Lisa Engleman, president of the Literary Managers and Dramaturgs of the Americas, hosted the workshop. Engleman, formerly resident dramaturg of the McFarter Theatre in Princeton, N.J., is serving as a visiting professor in the Department of Theatre at Washington University in St. Louis.

This year, Engleman also will take part in the PAD's symposium "Playwrights and Politics: Two Acts on the National and International Scene." This event, which runs from 3:30 p.m. to 5 p.m. Thursday, Nov. 9, in Milbank Hall, will examine the nature of political theatre and the issues held at the heart of national and international politics.

The Hotchner Festival has resulted in development of full plays that have gone on to win the biannual A.E. Hotchner Playwriting Competition, resulting in full productions as part of the regular PAD season.
Social responsibility of business takes center stage in Danforth Lecture Series final installment

By Barbara Rea

For years, the pharmaceutical industry was held in high esteem for its contributions to improvements in human health. But a Harris poll found that the industry’s reputation had dropped to the bottom rank, along with the oil and cigarette industries. The public felt that these industries were excessive and that the industry had not returned enough in benefits to the public to reduce the grip of HIV and AIDS.

P. Roy Vagelos, M.D., who led pharmaceutical giant Merck & Co. Inc. during that pivotal era in the industry’s history, will address the issue of corporate leaders’ role in social responsibility at 4 p.m. Monday, Nov. 13, in Gra- ham Chapel.

The talk is the final installment of the Danforth Lecture Series, which began with “Medicine and Society” and was followed by “Faith and Politics.” Vagelos’ lecture, titled “The Social Responsibility of Busi- ness,” will explore examples of corporate leadership failures. He will also respond to public concerns with negative changes in the industry.

Under Vagelos’ watch as Merck’s chief executive officer and chief medical officer, the company’s reputation took a gain in drug discoveries and became the leader in the industry. Among his accomplishments, Vagelos led Merck Research Labora- tories to a new level of activity in the development of statin drugs, which have lowered cholesterol levels.

In 1966, Vagelos chaired the Department of Biological Chemistry and Pharmacology at the University of Medicine and Science. In 1973, he led the ef- fort to establish the Division of Biology and Biochemical Sciences, which helped establish the Department of Biological Sciences, which helped establish the Missouri College of Medicine.

In 1980, Vagelos was awarded the Gargoyle on the lower level of the Danforth Campus, at the Gargoyle on the lower level of the University, in honor of the contributions the Danforth family and its foundation- ’s have made to the University of Medical Sciences.

The lecture is scheduled to be simulcast in the Medical Cam- pus and the Library on the campus and Danforth Campus at the Gargoyle on the lower level of the Medical Library.

The Danforth Lecture Series was created as part of the cele- bration of naming the main cam- pus the Danforth Campus in honor of the contributions the Danforth family and its foundation. The series has been held on campus every year.

The program is free and open to the public.

For more information, call 935-2585 or go online to danforth campus.wustl.edu/lectures. html.

Tumors

Three-drug combination slows cancer in mice — from Page 1

cells and then choosing com- ponents likely to interfere with their growth.

"This study, led by Joseph J. Ippolito, shows that by GABA, student demonstrates the im- portance of looking at bio- chemical systems," said senior author Jeffrey L. Gordon, M.D., director of the Center for Genes.

"Using a broad array of technolo- gies, we obtained a view of the tumor cells’ metabolism (the set of chemical reactions that are found within cells) and revealed aspects that were not expected and could be exploited," said the findings, published in a recent issue of the Proceedings of the National Academy of Sciences, expanded upon earlier work by the research group, which demonstrated that aggressive types of neuroendocrine tumors, seen in some types of lung, thyroid and pancreatic cancers, produce high amounts of a chemical called GABA and glutamate. Because of the abundance of GABA in these tumors, the au- thors hypothesized that the chemical could potentially target a specific group of tumors.

Neuroendocrine tumors, however, are free of targets that the techniques used to dec- ribe the biochemistry of the tu- mor can be applied to seek drugs that will affect tumor me- tabolism.

The techniques link DNA micro- arrays to real-time, which can pinpoint highly active genes in the tumors, to precise measure- ments of abundant metabolites and the potential byproducts within tumor cells. Using nuclear magnetic resonance spec- troscopy and mass spectrometry.

Software programs take this information and produce testable predictions on how these sub- stances might drive the specific metabolism of cancerous cells. Investigating on laboratory mice that developed metastases, the researchers discovered that the tumors have recep- tors on their surface that recog- nize these neurotransmitters and are activated by them. In addition, the tumor cells directly convert GABA and glutamate into sources of energy.

GABA, which is involved in a mechanism that increased the amount of fatty acids, an impor- tant source of energy in the bloodstream of the lab mice. They found that the neuronal- transmitters GABA, glutamate and glutamine not only stimulate pro- liferation of the tumor cells, but also they are able to secure sources of energy for the cells.

"We have identified a key vulner- ability of these tumors, which is neuroendocrine tumor cells, the re- searchers looked for a way to ex- ploit weakened by cancer, fail- ready approved for medical use by the Food and Drug Administra- tion.

Most drugs — amiodarone, a di- uretic and carbamazepine — used to treat Parkinson’s disease, used to treat patients suffering from the same mechanisms the research group had identified as important for the tumor cells’ energy-gathering reactions.

They combined these two drugs with a third drug, flumazenil.

Flumazenil binds to GABA re- ceptors on the surface of nerve cells, and the researchers hypothe- sized that it could inhibit GABA signaling between tumor cells.

The amiodarone-carbo- flumazenil combination was ad- ministered to mice that had prostate neuroendocrine tumors implanted beneath their skin. Compared to mice that didn’t receive the drug therapy, those treated with the combina- tion had 40 percent less tumor growth.

"We propose that this might be a potential drug therapy, espe- cially for patients with aggressive neuroendocrine tumors," Ippolito said. "Since the drug is already FDA-approved, they could be more quickly used as experi- mental therapeutics."

Examination of gene expres- sion profiles of more than 400 human cancers showed that the genes encoding the enzymes vital to these aggressive neuroendo- crine tumors were also expressed at high levels in some non-neu- roendocrine cancers.

This suggests that the three-drug therapy could work for patients with cancer of any type, according to the study authors.

"This approach is very powerful," Gordon said. "By combining this information with other genomic and computational methods that monitor the expression of genes and their roles in bio- chemical products, we can ex- plore the metabolism of these cells, looking for unusual path- ways that might reveal their po- tential vulnerabilities."

"Then we can see if medica- tions designed to target the mechanism of action is known and has been developed, estab- lished — that can be used to tar- get these pathways, and test the cellular pathways, test them in animal models of human cancer and if the results look promising, bring them to the patient’s bedside as part of a carefully controlled clinical trial."

Award

Devotees of community, University honored — from Page 1

Museum and the Saint Louis Symphony Orchestra presented the Missouri Commu- nity Service Award in the Greater St. Louis Area Council, Boy Scouts of America; together, they provide funds for scholarships that help inner-city children attend private schools.

Betty Farrel served on the University’s Board of Directors from 1987-1999. A staunch supporter of St. Louis’ cultural and educational organiza- tions, she has worked on behalf of the Saint Louis Art Mu- seum and the Missouri Botanical Garden.

Russell D. and Mary R. Sheldon The Sheldons are active volun- teers and philanthropists whose contributions have helped ad- vance research and educational research throughout Missouri.

In 2001, the Sheldons endowed a scholarship for the medical school’s Department of Anesthesiology.

A generous professorship, the Russell D. and Mary R. Sheldon Professorship in Anesthesiology, followed. In 2002, Russell D. E. Knecht, M.D., Ph.D. joined the professorship.

The Sheldon’s generosity to the University extends to the William Greenlee Elsby Society at Life Pa- trons.
Early receives Phi Beta Kappa Award for Distinguished Service to the Humanities

Gerald L. Early, Ph.D., the George E. Wantz Professor of English and Modern Letters and director of the National Endowment for the Humanities in Arts & Sciences, received the Phi Beta Kappa Award for Distinguished Service to the Humanities on Oct. 28. Early, professor of English, of African-American and Modern American Culture, is a fellow of the American Academy of Arts and Sciences, an editor of the early editions of the Oxford English Dictionary and a professor of English at Washington University in St. Louis, where he teaches students throughout the nation from chapters, associations and fellowships, a fellowship, a professorship and a professorship. The Phi Beta Kappa Society, which met Oct. 28-29 in Atlantic City, N.J., in recognition of significant contributions to the humanities, the award is a gift from the couple. Early, a fellow of the American Academy of Arts and Sciences, including Early based on nominations from chapters, associations and individual members. Early, the author of several books, including The Culture of Boxing: Essays on Priory, Literature, and American Culture, American Culture, which won the 1994 National Book Critics Circle Award for criticism, and his books, have all been published in the humanities.

Notables

Volleyball wins UAA, gains NCAA bid

The No. 2 volleyball team went 5-0, 3-0 in the conference to clinch the championship in Pittsburgh. With the team title Nov. 3-4 in Pittsburgh, the Bears defeated New York University 3-0 in the second round on Saturday at 5 p.m. Nov. 9, University of Rolland (Calif.) will play Hope College in the first round's match at 5 p.m. Nov. 10, while No. 25 Central Regional (Calif.) will play Wheaton College (Ill.) at 7:30 p.m. Nov. 11. Two winners will meet Saturday at 7:30 p.m. Admission for adults will be $6 and $3 for students and seniors. Washington University undergraduate students will be admitted free with a student ID.

Obituary

Zimmerman, 84

Herbert B. Zimmerman, M.D., a retired assistant professor of clinical medicine, died Thursday, Nov. 2, 2006, at Missouri Baptist Medical Center of congestive heart failure. Zimmerman earned a degree from the School of Medicine at Washington University in St. Louis in 1952. He was principal investigator at the medical school for the Multiple Risk Factor Intervention Trial in 1979, which showed that treating risk factors could reduce the death rate of coronary heart disease. Earlier this year, he was given the distinguished service award from the Department of Medicine and Barnes-Jewish Hospital.
Associate Dean Virginia Toliver has come a long way from rural Mississippi.

Washington People

Virginia Toliver (left), associate dean of University Libraries, chats with Debra Spraggins, library business officer for Olin Library. "What everyone who meets Virginia discovers right away is her great sense of humor and her infectious laugh," says colleague Jo Lowery. "She's one of a kind!"

From humble beginnings

Associate Dean Virginia Toliver has come a long way from rural Mississippi.

rural area outside of Tupelo, Miss., now to associate dean of a major academic library system is a circuitous one indeed.

Even though her parents lived right next door, Toliver was raised mainly by her grandparents. She recalls "Big Mama"—known to those outside the family as her grandmother—as being "the matriarch of the family." And Big Mama is a person that keeps cropping up at various points in Toliver's life.

She was so convinced that she had blown her chance at attending college, Toliver became coordinator in the new serials unit at Alcorn State University's library's administration, including budgeting, management, personnel, "things that I never thought I'd pose them to upper-management positions.

Association of Research Libraries mentors as a way to expose them to upper-management positions. And Big Mama is a person that keeps cropping up at various points in Toliver's life. It was an eye-opening experience from the start.

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