Nobel Prize-winning playwright had poor handwriting. Beat bard Allen century and a 1493 Latin edition of the Collections. There are, of course, more giants of literary history is one of the though she'd "had a frontal lobotomy." trans-Atlantic voyage made her feel as perceptive poet May Swenson's stormy process of catalyst design and testing. 

Elizabeth Macdonald, head of the string program in the Department of Music in Arts and Sciences, directs the Chamber Orchestra during the Jan. 21 dedication of the music department's new classroom building, which was constructed last fall behind Tietjens Hall.

'The scraps of history'

Department of Special Collections preserves 'the living culture'

Nobel Prize-winning playwright Samuel Beckett made mistakes. The elegant poet James Merrill had poor handwriting. Beat bard Allen Ginsberg is a terrible letter writer. And perceptive poet May Swenson's stormy trans-Atlantic voyage made her feel as though she had "a frontal lobotomy."

Discovering the little things about the giants of literary history is one of the perks of visiting the Washington University Libraries' Department of Special Collections. There are, of course, more sober items in the collections, such as Egyptian papyrus fragments from the first century and a 1493 Latin edition of the "Nuremberg Chronicle."

Since its founding in 1964, the special collections department has had a mission to preserve "the living culture," said Kevin Ray, head of the department.

The department's holdings include manuscripts, correspondence, rare books, a herbarium (the study of signs and symbols) collection and University Archives, which houses the history of the University and of 20th-century St. Louis.

Last year was a watershed for the department. Holdings expanded to more than half a million through generous gifts and spectacular acquisitions, including: • Two rare 17th-century volumes — one by Galileo Galilei, the other by Scipioni Chiaramonti — representing opposing sides of the debate over science and religion. The Galileo book is largely responsible for the astronomer's "trial" by the Spanish Inquisition.

• A $4.6 million bequest to support the special collections department and University Libraries, along with a collection of ancient books on comets, from book collector and University alums the late Philip Mills Arnold, a longtime supporter of the libraries. His generosity in the past created the Philip Mills Arnold Semiotics Collection.

• The records of The Center for Archæome, which was founded at the University in the 1970s and now is a private enterprise dedicated to restoring public art. The collection documents the center's research and activities, including the restoration of two major collections of outdoor sculptures at the Walker Art Center in Minneapolis and the Houston Museum of Fine Arts.

• A $2 million bequest to the special collections department and University Libraries, in addition to TV and film scripts, from University alumna and comic actress the late Mary Winkie.

• More of the late James Merrill's papers, which now measure more than 80 linear feet, and the completion of the collection of papers of the late novelist Stanley Elkin, Ph.D. Both additions helped the Modern Literature Collection — the department's crown jewel — more than double its holdings.

"We're outgrowing our space," Ray said of the entire special collections department.

The department's collections are so numerous that less than 1 percent fits in the exhibition space of the department's offices on Olney Library's fifth floor.

Besides space constraints, one of the department's biggest challenges is figuring out whose works to add to the collections. Often, Ray said, the decision is based on an educated guess about which contemporary writers are a Merrill or a Beckett in the making.

So far, those "guesses" have proven successful.

Catalyst-making method could hasten drug development

A Washington University chemist has developed a new way of making catalysts — greatly accelerating the process of catalyst design and testing. The method could hasten the development of drugs, pesticides, cosmetics and optical technologies while lowering costs.

Scott R. Gilbertson, Ph.D., assistant professor of chemistry in Arts and Sciences, has developed a catalog of building blocks used to make selective catalysts that bring about reactions forming important chiral molecules.

Molecules such as DNA, an array of hormones and proteins, and many other biologically active molecules can exist in two forms that are non-superimposable mirror images of each other. These are described as chiral. Human hands are chiral objects. Each hand is a mirror image of the other, but the left cannot be superimposed onto the right. In fact, the property of chirality often is referred to as "handedness."

"Chiral" is the Greek word for "handed."

Each twin molecule of a chiral pair is called an enantiomer. While each enantiomer shares with its mirror image identical physical properties, such as boiling and melting points, each one can be markedly different from its twin. In the compound carvone, for instance, one enantiomer smells like spearmint while the other smells like caraway.

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Enroll K. Pratzer, Ph.D., says social workers are asking questions that might not be raised by others

High-tech exposure 5
New camera system in the School of Art gives students practical hands-on experience

After one year, imaging center sharpens focus

More than a year after opening, the national Center for Imaging Science at Washington University held its first review of the pace-setting research the center is conducting on computerized image recognition.

The review conference, held Jan. 16 and 17 in Eric P. Newman Education Center on the Medical Campus, drew more than 70 of the world's imaging science experts.

The center, located on Jolley Hall's fourth floor and sponsored by the U.S. Army Research Office, is a collaboration involving experts from Washington University, Brown, Harvard and Yale universities, the Massachusetts Institute of Technology, and the University of Texas at Austin and Stanford.

One of the center's goals is to develop computerized automatic target recognition (ATR) systems that accurately identify images such as tanks and military equipment on battlefield data that are cluttered or distorted by landscape, camouflage and other conditions, such as snow, sand and rain.

Another goal is to use the theory applied in military image recognition to identify biological variation in biomedical engineering, a long-standing strength and tradition of the University's schools of Engineering and Applied Science and of Medicine.

Michael I. Miller, Ph.D., the Newton R. and Sarah Louisa Glasgow Wilson Professor of Electrical and Biomedical Engineering and director of the center, presented the opening remarks at the review conference.

"The 17 center members are working on image understanding, which is important to computer vision and the natural shapes in the world, whether they are biological, rigid such as chairs or objects in a room — or military vehicles," Miller said in an interview before the conference.

"In just one year, the center has made significant progress on three major issues in automatic target recognition. Of course, we have much work ahead of us, but I'm confident we will be able to apply our results to new ATR systems and also to use the results in other research applications, such as in bioengineering."

Miller said the center in its first year has addressed the areas of variability of biological variation in biomedical engineering, dynamic targets, cluttered image fields and performance and algorithmic advances has come up with fundamental breakthroughs in each.
Medical Update

Charlotte and Paul Hagemann endowed neurology professorship

T
two Washington University alumni, Dr. Charles M. Hagemann and his wife, Charlotte, have endowed a new chair at the School of Medicine. The Charlotte and Paul Hagemann Professorship in Molecular and Developmental Neurobiology will support basic research on Alzheimer's disease.

"If there are going to be significant advances in this area, they will come as a result of a new understanding of the central nervous system," said Paul O. Hagemann, M.D., professor emeritus of clinical medicine.

Hagemann became interested in this field after his second wife, Charlotte, and one of his brothers developed Alzheimer's disease. Hagemann also is a control subject in an Alzheimer's Disease Research Center study that indicates normal as well as abnormal functioning in persons with the disease.

"Paul Hagemann is one of Washington University's most generous and loyal alumni," said Chancellor Mark S. Thomas. "This contribution is another example of his significant impact on the University and will help us to attract and retain some of the nation's most outstanding scientists."

William A. Peck, M.D., executive vice chancellor for medical affairs and dean of the School of Medicine, said: "The professorship will enhance our already outstanding group of neuroscientists. The School of Medicine is proud to name it as a way to honor Dr. Hagemann and his long association with and support of the University."

The $1 million endowment will permanently fund a researcher in the Center for the Study of Nervous System Injury, which is directed by Dennis W. Choi, M.D., Ph.D., and Cornthwaite P. Jones Professor of Neurology and head of the Department of Neurology.

Hagemann has been associated with the University for 70 years. In 1926, the year his older brother graduated from the John M. Olin School of Business, he began walking back and forth from the family's University City home and the Hilltop Campus to study for a bachelor's degree in liberal arts. Returning to St. Louis in 1930, he took a streetcar to and from the medical school, where he earned a medical degree, cum laude, in 1934.

After spending a year as chief resident in medicine at Barnes Hospital and two years as an instructor in medicine at the medical school, Hagemann focused on private practice. In the middle of World War II, he spent two years in Los Alamos, N.M., providing medical care to Manhattan Project personnel.

When the war was over, Hagemann returned to St. Louis and joined the staff of Barnes Hospital, where he practiced and teaching a staff appointment at the medical school, where he was chief of the Arthritis Clinic from 1947 to 1959. He also was a consultant in arthritis at Barnes during those same years and was chief of medicine at St. Luke's Hospital from 1952 to 1962. At St. Luke's, he established a program in fish that was Washington University's Postdoctoral Primary Care Training Program in Internal Medicine. But throughout these years, his patients were his top priority.

One of Hagemann's proudest was William H. Danforth, chancellor of the University from 1971 to 1995 and now chairman of the Board of Trustees. "During my house-staff training in the 1950s, I learned a great deal from him about taking patients' complaints very seriously, even if I didn't understand them," Daniel said. "He certainly is one of the finest physicians I have known — very attuned at making diagnoses and prescribing treatment."

Hagemann also found time for volunteer work for both the American College of Physicians and the medical school. He chaired the fifth-, 15-, 20- and 25-year reunions of the Class of 1934 and was president of the Washington University Alumni Association and a member of the Alumni Council. He also was president of the Medical Century Club and chair of the Annual Fund and the Development Committee.

Hagemann made a significant gift to the School — making donations and contacting other alumni — an important part of his retirement.

His awards from the University include a Distinguished Alumnus Founder's Day in 1983 and an Alumni/ Faculty Award from the Medical Center Alumni Association in 1984. In 1986, he received the annual William Greerleaf Eliot Society Award, which honors an individual who has given outstanding service to the University. In 1990, the School of Medicine named a Distinguished Alumni Scholarship in Hagemann's honor.

In 1995, the medical school presented him with a Second Century Award, which recognizes individuals whose long-term commitment and participation have been key to the medical school's excellence as it enters its second century.

Charlotte M. Flachmann became Hagemann's second wife in December 1964. A member of the Arts and Sciences Class of 1938, she was an elementary-school teacher for several years in a small town near Galveston, Texas. After moving back to St. Louis in the 1940s, she helped organize several class reunions at the University and was active in the University's Woman's Club. She volunteered for the Women's Guild at St. Peter's Episcopal Church in Ladue, where she is a member of the vestry. She also volunteered at St. Louis Children's Hospital and the Junior League of St. Louis and was a board member for Carle & Counseling Inc., a pastoral counseling service in Ladue.

Medical skaters

Medical students, from left, David Shilt, Grace Chen, Joanna Oda and Roxana Rosas enjoy an American Medical Students Association skating event Friday, Jan. 24, at the Steinberg Skating Rink in Forest Park.

Down syndrome mouse might provide clues to Alzheimer's disease

A paper in a recent issue of the Proceedings of the National Academy of Sciences describes the first animal model for studying the progression of Down syndrome. The mouse model also will aid research on Alzheimer's disease, the investigators said.

"As well as observing behavior in these mice that resembles a mental retardation, we find age-related changes in the brain that are like those of some that occur in Alzheimer's disease," said lead author David M. Holtzman, M.D., assistant professor of neurology and of molecular biology and pharmacology.

One in 800 live human births results in Down syndrome, the most frequent cause of mental retardation. As well as being developmentally delayed, persons with Down syndrome begin to lose brain cells at a rate that is 10 times faster than normal individuals. By old age, there is a 40 percent loss. These types of neurons do not disappear from regions of the brain that are not affected by Alzheimer's disease, however.

The researchers found that two genes in the duplicated part of chromosome 16 — the gene for superoxide dismutase and the one for amyloid precursor protein — were overexpressed, as they are in persons with Down syndrome. The gene for amyloid, which is implicated in Alzheimer's disease, also was overexpressed, even though it does not reside on chromosome 16. "It is possible that this region contains a gene that regulates amyloid production," Holtzman said.

Unlike Alzheimer's patients, the mice did not develop beta-amyloid plaques in the brain. "In Down syndrome, the development of beta-amyloid plaques that involve more than simple overexpression of amyloid precursor protein. And Alzheimer's disease may be much more complicated than deposition in the brain of beta-amyloid," Holtzman said. "All we really know is that Alzheimer's disease involves neuronal dysfunction and loss that is associated with a characteristic pathology. With these mice, we may be able to study some of the other factors that contribute to neuron degeneration in this disorder."
A director of the Center for Mental Health Services Research at the George Warren Brown School of Social Work, Enola K. Proctor, Ph.D., is at the forefront of a national effort to involve social workers as integral components in research that is transforming the way medical and mental health services are delivered to the public.

"Social work does have an important and perhaps unique perspective to bring to the table in the building of a community," Proctor, who has been a member of the social work faculty since 1977 and has been a fixture at the school ever since, said. "Proctor has been a member of the center's faculty since 1977, but the strength of the institute's first center specifically designed to spur research on mental health issues is that it has been accomplished in its first five years of operation," said Kenneth L. Lutterman, associate director of epidemiology and social services research at the NIMH.

In many ways, the center's success represents a substantial change in attitude sweeping through the social work profession — one that has placed increasing emphasis on the use of rigorous research to build knowledge and guide improvements in social work programs, services and practices. Proctor has contributed significantly to social work school's growing reputation as a leader in helping social workers reap the benefits of ground-breaking research.

Proctor is a particularly important because social workers as a group provide more mental health services than any other profession," Lutterman added. "The center has made a tremendous impression, both at George Warren Brown and through the leadership that is being given in the social work community."

A desire to help others

While Proctor spends much of her time helping social workers understand the value of well-designed research projects, she admits having had little interest in research when she began her career. Born in the small Midwestern industrial town of Anderson, Ind., she earned a bachelor's degree in sociology from Butler University in Indianapolis in 1970 and a master's degree in social work from the University of Arkansas.

"I didn't think of it as cut-and-dried. I began to realize that not all the problems are too complex to be understood from just one perspective," she said. "We know the problems of health care are involved in the delivery of medical and mental health services. Social workers face incredible challenges in hospitalization, and the scrutiny is so intense," Proctor said. "I've always been intrigued with trying to understand how social work practices could be made more effective, but the health arena is especially interesting because improvements there make such a huge difference in the quality of people's lives."

As director of the social work school's doctoral program at Washington University, Proctor leads a group of more than 80 doctoral students and 40 masters-level students in examining the delivery of mental health services by educators, social workers, public health administrators and others who need the care that various systems are trying to deliver.

Social workers are raising the public's awareness and understanding of what has been accomplished in its first five years of operation, said Kenneth L. Lutterman, associate director of epidemiology and social services research at the NIMH.

"We think this grant is particularly important for people who need the care that various systems are trying to deliver," Proctor said. "We're trying to understand how social work practices could be made more effective, but the health arena is especially interesting because improvements there make such a huge difference in the quality of people's lives."

Enola Proctor, Ph.D., believes social work complements — not competes with — other disciplines that are involved in the delivery of medical and mental health services.

"She's the kind of person you can look at and just say, 'Wow! Here's a role model for us.'" — Ann Dinan

While long hours make it possible for Proctor to remain devoted to her students and her research, she preserves quality time for her husband, Frank, a minister at the Pilgrim Congregational Church in the Central West End, and son, Brad, a freshman at Ladue High School. Her daughter, Anne, is a freshman studying art history at Wellesley College in Massachusetts.

"She's the kind of person who needs a social worker," said Ann Dinan, a second-year doctoral student. "She puts in extremely long hours, and she never seems frazzled. She's the kind of person you can look at and just say, 'Wow! Here's a role model for us.'"

Proctor's research examines delivery systems for mental health services by educators, social workers, public health administrators and others who need the care that various systems are trying to deliver.

"Several of us who are NIMH fellows owe Enola a great debt," Dinan said. "She's extremely intelligent and a good role model for us."

While Proctor specialties in community and school psychology, she also has been interested in the care of family and friends.

"That's when my attitude about research began to change. I began to see that we had so many kids whose problems were not reflected in the current research," she added. "That's what got me thinking about the value of research and made me interested in pursuing it. Research has never appealed to me because I always thought of it as cut-and-dried. I began to realize that not only was there a practical application for research but also that there was a tremendous need for research that had obvious and meaningful applications."

Proctor soon enrolled in the social work doctoral program at Washington University and has been a fixture at the school ever since. Earning a doctorate in 1978, she continued her research as an assistant professor and launched a new career in the classroom. Her enthusiasm and hard work have won praise from students in the master's and doctoral programs.

"Enola is a great teacher," Dinan said. "When I was a second-year doctoral student, she put me on a team with several other students who were involved in some clinical work. We paired Proctor and social work Professor Aaron Rosen, professor of medicine in Arts and Sciences; Eugene H. Rubin, M.D., professor of psychiatry at the medical school; and Edward L. Spittanget, Ph.D., professor of mathematics in Arts and Sciences.

Another mental health project in the planning stage will pair Proctor and social work Professor Aaron Rosen, Ph.D., with a health economist and a public-health psychologist from the University of Iowa. The team will examine clinical decisions and treatment recommendations made by social workers who provide services to depressed minority youth in a large urban center in southern Iowa. The team will examine clinical decisions and treatment recommendations made by social workers who provide services to depressed minority youth in a large urban center in southern Iowa. The team will examine clinical decisions and treatment recommendations made by social workers who provide services to depressed minority youth in a large urban center in southern Iowa. The team will examine clinical decisions and treatment recommendations made by social workers who provide services to depressed minority youth in a large urban center in southern Iowa.

The federal government traditionally has contributed little or no research dollars to helping social workers understand how social work practices could be made more effective, but the health arena is especially interesting because improvements there make such a huge difference in the quality of people's lives."

Gerry Everding

Jan. 30, 1997
Calendar

Visit Washington University's on-line calendar at
http://cal.wustl.edu/calendar/events/1.3

Jan. 30-Feb. 8

Exhibitions

*a sabbatical journal: Reflections of Paris in Exile* December 20, 1996. A collection of 20th-century masterpieces by artists of the "New York School." Through April 6. Gallery of Art, upper gallery, Steinberg Hall. Hours: 10 a.m. to 4:30 p.m. weekdays; noon to 5 p.m. weekends. 933-4523.

"Abstract Expressionism: American Art in the 1950s & 1960s." A collection of 20th-century masterpieces by artists of the "New York School." Through March 30. Gallery of Art, lower gallery, Steinberg Hall. Hours: 10 a.m. to 4:30 p.m. weekdays; noon to 5 p.m. weekends. 933-4523.

Arts Connection/City Faces exhibit. Features works created by City Faces participants. Through March 29. Center Of Contemporary Arts, 524 Trinity Ave. 725-6355.

*The Lens of Architecture: Rouchamp Through Herzog.* Architectural photographic graphs by 20th-century photographer Lucien Harvey. Through March 30. Gallery of Art, lower gallery, Steinberg Hall. Hours: 10 a.m. to 4:30 p.m. weekdays; noon to 5 p.m. weekends. 933-4523.

Films

Monday, Feb. 3

3 p.m. Russf Film. "Close to Eden." Room 219 South Ridgley Hall. 935-5177.

Tuesday, Feb. 4

6 p.m. Chinese Film Series. "Girl From Hong Kong." Architectural photographic graphs by 20th-century photographer Lucien Harvey. Through March 30. Gallery of Art, lower gallery, Steinberg Hall. Hours: 10 a.m. to 4:30 p.m. weekdays; noon to 5 p.m. weekends. 933-4523.

Wednesday, Feb. 5


Friday, Jan. 31

9:15 a.m. Pediatric Grand Rounds. "Absence Status Epilepticus in Infants and Children." Robert F. Foglia, assoc. prof., of neurology and head, Divisi-

Calendar guidelines

Events sponsored by the University — its departments, colleges, centers, organizations and recognized student organizations — are published in the Calendar. All events are free and open to the public, unless otherwise noted.

Calendar submissions should state time, date, place, sponsor(s), title of event, type of event, admission (free orVertexAttrib(s)), and admission cost. Quality promotional photograph (200 dpi; 300 dpi preferred) is welcome. Send items to Judy Ruhland at Campus Box 1070 or via fax at (314) 935-4926. The deadline for all entries is noon Tuesday prior to publication. Late entries will be held for the following week's issue. The Calendar is printed every Thursday during the school year, except holidays, and monthly during the summer. If you are uncertain about a deadline, call the schedule office or check our information, (call (314) 935-4926.

Events for WU students. Edison Theatre. 935-6543. Features the Merce Cunningham Dance Company. (Also Feb. 1, same time, and Feb. 2 at 2 p.m.) Co-sponsored by Dance Department. For WU students (no non-

Friday, Feb. 7

8 a.m. "THREE THURSDAYS "OVA TIONS!" series presents sociologist Slapong Gray in "It’s A Sloppy Sleep." (Also Feb. 5, same time.) Cosponsored by the Department of Philosophy, the Department of African and African American Studies, and the Office of Community Affairs. For WU students. Edison Theatre. (See story on page 6.) 935-6543.

Performances

Wednesday, Feb. 5


11 a.m. Assembly Seminar. "Comes of Memory: The Rise of False Memories and the Downfall of Mental Health." Elizabeth F. Loftus, prof., of psychology, U. of Wash-

Thursday, Feb. 6

4 p.m. Philosophy and molecular bio-

Science. "Transplant Annual Model-

Melds of Cholesterol Disorders." Stanley L. Rail Jr., Gladstone Institute of Cardiovascu-

lar Disease, U. of California at San Francisco. Cori Aud., 4565 McKinley Ave. 362-0261.


Saturday, Feb. 8

3:30 p.m. Art history and archeology lecture. "The RAke Proseges." David Hockney, Henry Geldzahler and Late Mod-


prof., Yale U Room 200 Steinberg Hall.

Monday, Feb. 3

4.p.m. Immunology seminar. "Phosphory-

anti-Transthyretin: A Kinase Signaling Pathway in T Cells," Denson Carrington, researcher, Lyman Center, Division of Medi- 

cal Oncology, U. of Connecticut. Steinberg Hall.

Tuesday, Feb. 4

12:30 p.m. Therapy research seminar. "Divided Attention During Move-

ment of the Human Finger in Reference to Alzheimer’s Type," Virginia Birklees, researcher, post doc., of neurology and the Alzheimer’s Center Park Blvd. 4444 Forest Park Blvd. 286-1400.


Wednesday, Feb. 5

4 p.m. Diabetes research seminar. "Participation of Aldo-Keto Reductases in Diverse Metabolic Pathways," J. Mark Pettend, assoc. prof., of genetics and of ophthalmology and vision sciences. Pathol-

ogy, Room 372 West End Hall. 726-3453.


Sunday, Feb. 8


Music

Wind Ensemble auditions. The Wind Ensemble holds auditions for trumpet, trom-

tone, saxophone, flute, bass- and percussion players for spring semester concerts. To schedule an audition, call Dan Progave at 972-7811.


Saturday, Feb. 1


Saturday, Feb. 8

4:6 p.m. Catholic Student Center event. Freshman Branch. "The Challenge of Your Hour." Catholic Student Center, 6352 Forsyth Blvd. 725-3358.

Sunday, Feb. 8

9 a.m.-1 p.m. Book arts workshop. "Valentine Books." Instructor Janis Frankfurt will demonstrate and provide materials to make two small Valentine cards. Room 104 Bestley Hall. Cost: $35. 935-5643.

Music

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Memory expert Elizabeth Loftus to deliver Assembly Series lecture

Psychologist Elizabeth F. Loftus, Ph.D., will deliver an Assembly Series lecture titled "Memory: The Rise of False Memories and the Downfall of Mental Health" at 11 a.m. on Wednesday, Feb. 5, in Grainger Hall. The lecture is free and open to the public.

Loftus is a professor of psychology and adjunct professor of law at the University of Washington in Seattle. She earned a bachelor's degree in biology from Stanford University, and a doctorate in experimental psychology and both from Stanford University.

She received a master's degree in psychology and math from the University of California at Los Angeles in 1966, graduating with highest honors. She was a research fellow in the areas of Repressed Memory for many years. In 1983, she was invited to present her work to the Royal Society of London. She earned a bachelor's degree in psychology and both from Stanford University.

Loftus has served as the center of attention last weekend where she left off from an outstanding cross country season by setting a school record in the 3,000 meters, Saturday, Feb. 2, at Emory University (Albany) (UA).

Four years' worth of digital photography has equipped the photographer with a whole new set of tools that can be seen in the work of Stan J. Strembicki, art professor and head of the photography program. The University of the latest in the photography program. The University of the technology lies, Strembicki explained, "For years we've been talking about digital technology, acquired last session, has Washington University on the leading edge of photography education, said Stan J. Strembicki, art professor and head of the photography program. The University of the latest in the photography program. The University of...
Spalding Gray to talk about slippery slope of fatherhood after 50

Spalding Gray, the incomparable monologist/poet/philosopher, returns to Edison next month with a new work about fatherhood after 50 and gaining one's equilibrium through the joys and terrors of learning to ski.

His latest monologue, "It's a Slippery Slope," stars Jack Lapointe in Edison Flush from a three-month run at New York City's Lincoln Center Theater. Gray's performances here, at 8 p.m. Feb. 7 and 8, are part of the "OVATIONS!" series.

Gray's appearance replaces Jane Lapointe's performances of "Shakespeare As I Knew Her," which were postponed because of the vicissitudes of her 步.
Barbara N. Kunkel, Ph.D., assistant professor of biology (1995), died in her sleep Sunday, Jan. 19, 1997, at her University of California at Berkeley. She was 50.

Lisa Blakeley, of Creve Coeur, taught music at Washington University from 1951 until she retired in 1980 after 29 years of service.

Barbara Kunkel, Ph.D., assistant professor of biology (1995), died in her sleep Sunday, Jan. 19, 1997, at her University of California at Berkeley. She was 50.

The arts enrich our lives in an infinite number of ways. But without an infusion of riches from the arts, the power of a symphony, the drama of a soap opera, the grace of a ballet or the introspection of a novel — the arts would not be available.

To help keep the arts in the St. Louis region, the University of St. Louis (A&E) offers a scholarship named in honor of the late Lisa Blakeley, a music educator and researcher who continued a postdoctoral fellowship at the University of California at Berkeley in 1984 from the University of California at Berkeley. She received a bachelor's degree in genetics in 1990 from Harvard University.

The David and Lucile Packard Foundation fellowship grant awarded to Barbara Kunkel will be used to support a model plant. She was among the first students to recognize the University of California at Berkeley for creative and original research.

The journal's emphasis on the relationship between molecular and pathogenicity of the bacterial pathogens. In the fall of 1994, Kunkel published a paper in the Journal of Molecular Biology that described the cloning and characterization of the bacterial resistance genes in Anobisophila thaila, a model plant. She was among the first students to recognize the University of California at Berkeley for creative and original research.

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Medical Campus

The following is a partial list of positions available at the School of Medicine. Employment status, duties and responsibilities may change during the course of employment. All candidates are encouraged to submit a resume or curriculum vitae via the electronic recruitment system. Applicants must also complete an online application at http://www.med.wustl.edu/jobs.

Requirements: Candidates must have a degree in computer science or related field, with experience in the design and development of software applications. Strong communication skills are required.

Medical School/Department of Psychiatry

1. **Research Assistant/Associate**
   - **Position**: Research Assistant/Associate
   - **Description**: A research assistant/associate position is available in the Department of Psychiatry. The candidate will be involved in research projects related to psychiatric disorders. This position requires a Ph.D. in psychology or related field.
   - **Responsibilities**: Conduct research projects, analyze data, and prepare reports.
   - **Qualifications**: A Ph.D. in psychology or related field is required. Experience in research is preferred.

2. **Clinical Research Coordinator**
   - **Position**: Clinical Research Coordinator
   - **Description**: A clinical research coordinator position is available in the Department of Psychiatry. The candidate will be responsible for coordinating clinical research projects.
   - **Responsibilities**: Oversee the recruitment of patients, manage data collection, and ensure compliance with institutional policies and regulatory requirements.
   - **Qualifications**: A master's degree in psychology or related field is required. Experience in coordinating clinical research is preferred.

3. **Data Manager**
   - **Position**: Data Manager
   - **Description**: A data manager position is available in the Department of Psychiatry. The candidate will be responsible for managing and analyzing data.
   - **Responsibilities**: Manage data collection, perform statistical analyses, and prepare reports.
   - **Qualifications**: A master's degree in statistics or related field is required. Experience in data management is preferred.

4. **Clinical Research Nurse**
   - **Position**: Clinical Research Nurse
   - **Description**: A clinical research nurse position is available in the Department of Psychiatry. The candidate will be responsible for providing clinical research support.
   - **Responsibilities**: Provide clinical research support, manage patient data, and ensure compliance with institutional policies and regulatory requirements.
   - **Qualifications**: A bachelor's degree in nursing or related field is required. Experience in clinical research is preferred.

5. **Biostatistician**
   - **Position**: Biostatistician
   - **Description**: A biostatistician position is available in the Department of Psychiatry. The candidate will be responsible for performing statistical analyses.
   - **Responsibilities**: Perform statistical analyses, interpret data, and prepare reports.
   - **Qualifications**: A master's degree in statistics or related field is required. Experience in biostatistics is preferred.

6. **Clinical Research Coordinator**
   - **Position**: Clinical Research Coordinator
   - **Description**: A clinical research coordinator position is available in the Department of Psychiatry. The candidate will be responsible for coordinating clinical research projects.
   - **Responsibilities**: Oversee the recruitment of patients, manage data collection, and ensure compliance with institutional policies and regulatory requirements.
   - **Qualifications**: A master's degree in psychology or related field is required. Experience in coordinating clinical research is preferred.

7. **Data Manager**
   - **Position**: Data Manager
   - **Description**: A data manager position is available in the Department of Psychiatry. The candidate will be responsible for managing and analyzing data.
   - **Responsibilities**: Manage data collection, perform statistical analyses, and prepare reports.
   - **Qualifications**: A master's degree in statistics or related field is required. Experience in data management is preferred.

8. **Clinical Research Nurse**
   - **Position**: Clinical Research Nurse
   - **Description**: A clinical research nurse position is available in the Department of Psychiatry. The candidate will be responsible for providing clinical research support.
   - **Responsibilities**: Provide clinical research support, manage patient data, and ensure compliance with institutional policies and regulatory requirements.
   - **Qualifications**: A bachelor's degree in nursing or related field is required. Experience in clinical research is preferred.

9. **Biostatistician**
   - **Position**: Biostatistician
   - **Description**: A biostatistician position is available in the Department of Psychiatry. The candidate will be responsible for performing statistical analyses.
   - **Responsibilities**: Perform statistical analyses, interpret data, and prepare reports.
   - **Qualifications**: A master's degree in statistics or related field is required. Experience in biostatistics is preferred.

10. **Clinical Research Coordinator**
    - **Position**: Clinical Research Coordinator
    - **Description**: A clinical research coordinator position is available in the Department of Psychiatry. The candidate will be responsible for coordinating clinical research projects.
    - **Responsibilities**: Oversee the recruitment of patients, manage data collection, and ensure compliance with institutional policies and regulatory requirements.
    - **Qualifications**: A master's degree in psychology or related field is required. Experience in coordinating clinical research is preferred.

11. **Data Manager**
    - **Position**: Data Manager
    - **Description**: A data manager position is available in the Department of Psychiatry. The candidate will be responsible for managing and analyzing data.
    - **Responsibilities**: Manage data collection, perform statistical analyses, and prepare reports.
    - **Qualifications**: A master's degree in statistics or related field is required. Experience in data management is preferred.

12. **Clinical Research Nurse**
    - **Position**: Clinical Research Nurse
    - **Description**: A clinical research nurse position is available in the Department of Psychiatry. The candidate will be responsible for providing clinical research support.
    - **Responsibilities**: Provide clinical research support, manage patient data, and ensure compliance with institutional policies and regulatory requirements.
    - **Qualifications**: A bachelor's degree in nursing or related field is required. Experience in clinical research is preferred.

13. **Biostatistician**
    - **Position**: Biostatistician
    - **Description**: A biostatistician position is available in the Department of Psychiatry. The candidate will be responsible for performing statistical analyses.
    - **Responsibilities**: Perform statistical analyses, interpret data, and prepare reports.
    - **Qualifications**: A master's degree in statistics or related field is required. Experience in biostatistics is preferred.

14. **Clinical Research Coordinator**
    - **Position**: Clinical Research Coordinator
    - **Description**: A clinical research coordinator position is available in the Department of Psychiatry. The candidate will be responsible for coordinating clinical research projects.
    - **Responsibilities**: Oversee the recruitment of patients, manage data collection, and ensure compliance with institutional policies and regulatory requirements.
    - **Qualifications**: A master's degree in psychology or related field is required. Experience in coordinating clinical research is preferred.

15. **Data Manager**
    - **Position**: Data Manager
    - **Description**: A data manager position is available in the Department of Psychiatry. The candidate will be responsible for managing and analyzing data.
    - **Responsibilities**: Manage data collection, perform statistical analyses, and prepare reports.
    - **Qualifications**: A master's degree in statistics or related field is required. Experience in data management is preferred.

16. **Clinical Research Nurse**
    - **Position**: Clinical Research Nurse
    - **Description**: A clinical research nurse position is available in the Department of Psychiatry. The candidate will be responsible for providing clinical research support.
    - **Responsibilities**: Provide clinical research support, manage patient data, and ensure compliance with institutional policies and regulatory requirements.
    - **Qualifications**: A bachelor's degree in nursing or related field is required. Experience in clinical research is preferred.

17. **Biostatistician**
    - **Position**: Biostatistician
    - **Description**: A biostatistician position is available in the Department of Psychiatry. The candidate will be responsible for performing statistical analyses.
    - **Responsibilities**: Perform statistical analyses, interpret data, and prepare reports.
    - **Qualifications**: A master's degree in statistics or related field is required. Experience in biostatistics is preferred.

18. **Clinical Research Coordinator**
    - **Position**: Clinical Research Coordinator
    - **Description**: A clinical research coordinator position is available in the Department of Psychiatry. The candidate will be responsible for coordinating clinical research projects.
    - **Responsibilities**: Oversee the recruitment of patients, manage data collection, and ensure compliance with institutional policies and regulatory requirements.
    - **Qualifications**: A master's degree in psychology or related field is required. Experience in coordinating clinical research is preferred.

19. **Data Manager**
    - **Position**: Data Manager
    - **Description**: A data manager position is available in the Department of Psychiatry. The candidate will be responsible for managing and analyzing data.
    - **Responsibilities**: Manage data collection, perform statistical analyses, and prepare reports.
    - **Qualifications**: A master's degree in statistics or related field is required. Experience in data management is preferred.

20. **Clinical Research Nurse**
    - **Position**: Clinical Research Nurse
    - **Description**: A clinical research nurse position is available in the Department of Psychiatry. The candidate will be responsible for providing clinical research support.
    - **Responsibilities**: Provide clinical research support, manage patient data, and ensure compliance with institutional policies and regulatory requirements.
    - **Qualifications**: A bachelor's degree in nursing or related field is required. Experience in clinical research is preferred.

21. **Biostatistician**
    - **Position**: Biostatistician
    - **Description**: A biostatistician position is available in the Department of Psychiatry. The candidate will be responsible for performing statistical analyses.
    - **Responsibilities**: Perform statistical analyses, interpret data, and prepare reports.
    - **Qualifications**: A master's degree in statistics or related field is required. Experience in biostatistics is preferred.