

2-8-1996

Washington University Record, February 8, 1996

Follow this and additional works at: <http://digitalcommons.wustl.edu/record>

Recommended Citation

"Washington University Record, February 8, 1996" (1996). *Washington University Record*. Book 713.
<http://digitalcommons.wustl.edu/record/713>

This Article is brought to you for free and open access by the Washington University Publications at Digital Commons@Becker. It has been accepted for inclusion in Washington University Record by an authorized administrator of Digital Commons@Becker. For more information, please contact engeszer@wustl.edu.

MS SAMUELA
BOX NO. 8132
KOFFMAN

Medicine, HHMI to develop library of mouse genes

To speed the identification of genes related to human diseases and to aid in the understanding of basic biological processes, the School of Medicine and the Howard Hughes Medical Institute (HHMI) are collaborating to identify and partially sequence the majority of mouse genes.

Researchers plan to generate as many as 400,000 partial sequences of genes that are expressed during the embryonic and fetal stages in an effort to survey the entire set of mouse genes. The availability of these gene fragments, or expressed sequence tags (ESTs), should accelerate the rate at which HHMI researchers and other biomedical scientists find disease-related genes as well as genes that control normal cell function.

The \$2.3 million two-year project will be conducted at the School of Medicine and will be directed by Robert H. Waterston, M.D., Ph.D., James S. McDonnell Professor of Genetics, head of the Department of Genetics and professor of anatomy and neurobiology.

Waterston's research group will begin the mouse EST project with gene libraries that contain samples of nearly all embryonic and fetal mouse tissues. The libraries, developed by Bento Soares, professor of genetics at Columbia University, with support from the National Center for Genome Research, will provide a source of genetic material in which individual messenger RNAs are copied to form complementary DNAs (cDNAs). Waterston's research team will sequence segments of the individual cDNAs to create the ESTs.

Genetic data to go on line

"Once the sequences are completed and verified, they will be made available immediately via the Internet. This resource will be of great value to geneticists and developmental biologists who are using mouse models to seek clues to basic biological processes and the genetic origins of human diseases," said Purnell W. Choppin, M.D., president of HHMI. "This collaboration is an excellent opportunity to make these important data available to scientists around the world."

"HHMI should be commended for making this research collaboration possible," said Waterston. "These results will provide immediate access to many mouse genes for investigators worldwide. They also will be invaluable in interpreting sequences generated by the international Human Genome Project."

The ESTs will come from throughout the entire mouse genome and subsequently can be used to create genetic

Continued on page 6



This 1957 photo shows Washington University engineers at an early computer printer on the right and a woman operating a key-punch machine on the left. Nearly 40 years later, Washington University's 125-year-old School of Engineering and Applied Science is highly regarded for its computer science prowess and ranks among the top five nationally in computer networking.

'Service to Society'

Engineering school gears up for 125th anniversary celebration

The 1995-96 academic year marks the 125th anniversary of the Washington University School of Engineering and Applied Science, one of the nation's oldest engineering schools. The school has chosen this spring semester to celebrate the milestone with a host of lively events, all falling under the anniversary theme of "Service to Society."

"The events are planned to involve everyone in the Washington University engineering community, and they're intended to be fun as well as informative and inspirational," said Christopher I. Byrnes, Ph.D., who in 1991 became the eighth dean in the engineering school's history. "The school has many important accomplishments, with many more to come, and it is a mainstay of academic life at Washington University. Nearly 25 percent of the bachelor's degrees earned here are in engineering, and our alumni have made outstanding contributions in engineering and technology throughout the nation and the world."

After the founding of the University in 1853, the O'Fallon Polytechnic Institute — what was to become the School of Engineering and Applied Science — began offering evening lectures, elementary extension courses and practical shop experience aimed at St. Louis laborers who wanted to improve their technical skills. The O'Fallon institute, located on the fourth floor of a now defunct building at 17th and Washington streets in downtown St. Louis, was the University's first principal department. In the 1870-71 academic year, the School of Engineering officially was inaugurated. Today, the school occupies nearly 170,000 square feet in six Hilltop Campus buildings.

Byrnes noted that the school has made many recent strides that have advanced its reputation. Among them are:

- A growth in patents issued from 10 in 1983 to more than 50 in 1995.
- The receipt of more than \$21 million in research funding for engineering

projects in 1995, according to U.S. News & World Report.

- A national ranking of 20th among more than 300 engineering schools in graduate-sponsored research programs.

- Sixth among all schools in the number (seven) of National Science Foundation graduate fellowship awards.

- The attraction of top students to the school from high schools around the country.

- Since 1974, the incorporation of several alumni-sponsored programs that

are influential in helping students join the work force.

Washington University's engineering professors are making their marks in the traditional engineering disciplines and across a wide spectrum of interdisciplinary programs and research, such as biomedical, computer, environmental and materials science engineering.

For instance, Washington University scientists and engineers, led by Jerome R. Cox Jr., Sc.D., the Harold B. and

Continued on page 8

125th Anniversary Schedule of Events

March 12: Annual School of Engineering and Applied Science Alumni Achievement Awards dinner, America's Center, St. Louis.

March 22: Honors Banquet recognizing engineering honors students. (Campus location to be announced.)

March 27-April 3: Engineering Week at Washington University.

March 27: Gala Birthday Bash luncheon for engineering students, faculty and staff, Lopata Hall Gallery. Hosted by Christopher I. Byrnes, Ph.D., dean of the school, the bash will be an opportunity to celebrate the school's long existence and to appreciate its history and contributions. The Society of Women Engineers Pageant will be held in conjunction with the Birthday Bash.

March 29: The Association of Graduate Engineering Students will hold a "research day." (Time and location to be announced.) This day also kicks off the undergraduate student design competitions.

March 29: Student dance, 10:30 p.m., Lopata Hall Gallery.

April 2: The Engineering Olympics, a

more lighthearted collection of events featuring paper-airplane and egg-toss contests, among others, will be held in the afternoon, Lopata Hall Gallery.

April 3: There will be a lunch and awards ceremony for the undergraduate engineering designs. (Time and location to be announced.)

May 3: Lecture and 125th anniversary banquet. The ceremonies begin at 4 p.m. in Edison Theatre with a lecture by Robert Galvin, chairman of Motorola Corp., and William Braun, senior vice president and director of research and development for Motorola. After the lecture, a reception open to the University community will be held in Bowles Plaza, Mallinckrodt Center. Later that evening, the anniversary banquet will be held at The Ritz-Carlton hotel in Clayton, where Braun will receive the school's first Award for Excellence in Engineering and Technology in recognition of his contributions to Motorola.

Some of the above events may be by invitation only. For more information, call 935-5363.

In this issue ...

Seasonal swings..... 2

People who suffer from winter mood changes are likely to have family members with the same problem

Fostering Independence 3

Julio V. Santiago, M.D., teaches diabetics to assume a larger role in managing their disease

Streamlining the process ... 6

Patrons of Washington University Libraries now can renew materials via the Internet

Medical Update

Researchers find genetic link to seasonal mood swings

School of Medicine investigators have found that people who suffer from seasonal mood changes are likely to have family members with the same problem.

In the January issue of the *Archives of General Psychiatry*, the researchers reported that at least 29 percent of the risk for seasonal mood changes is caused by inherited biological factors.

Called seasonality, the changes in mood, energy, social activity, sleep, appetite and weight are most common in the winter, when days get shorter and less natural light is available. Patients with the most extreme forms of seasonality, known clinically as seasonal affective disorder (SAD), often are treated with light therapy. This new study is the first formal look at whether seasonality as a trait is genetically inherited.

Principal investigator Pamela Madden, Ph.D., research instructor of psychiatry, studied a sample of 4,639 adult twins from Australia to look at genetic influences on seasonal changes in mood and behavior.

"An advantage to conducting a study on seasonality in Australia is that their seasons are reversed — their winter occurs during our summer," said Madden. "This allowed us to distinguish the holiday blues from a winter form of seasonality."

She found that 13 percent of the twins in the sample reported that seasonality was a problem for them, but the number who had symptoms was higher. About 17 percent reported that they suffered from mood changes, weight gain and sleep problems during the winter. Only 2 percent of the sample reported the extreme degree of seasonality described by patients with SAD.

The sample included both identical and fraternal twins. Because identical twins share 100 percent of their genetic material and fraternal twins share about 50 percent, Madden said, the researchers expected to observe different levels of risk in identical and fraternal twins.

"We found that when one fraternal twin complained of symptoms of season-

ality, it was certainly more likely that his or her twin also would be affected. But with identical twins, the link was even stronger. What we found suggests that genes play an important role in determining whether or not someone experiences seasonality," Madden explained.

The researchers found that when a fraternal twin reported problems with seasonality, the risk for the other twin compared with the average person increased 50 percent. In identical twins, the risk increased 75 percent.

Madden and colleagues found a "significant genetic influence" on seasonality, but they believe environmental factors

also are crucial. While they found that 29 percent of the risk is genetic, the rest of the risk lies in environmental factors.

"There is evidence from clinical research to suggest that this condition may be triggered by changes in the environment, such as reductions in sunlight, but what we have shown is that genetic factors may play an important role in determining how sensitive a person may be to the onset of winter," Madden said.

The investigators determined that genetic effects exerted a similar influence over the various symptoms of seasonality. Changes in eating, sleeping,

weight, social contact, energy level and mood tended to occur together. If one twin had those seasonal symptoms, the other twin was at risk for all of them as well. They also found very little difference between men and women in the risk for seasonal changes.

As a result of these findings, Madden said she would expect that when a person suffers from one symptom of seasonality, he or she would be likely to report problems from all symptoms of the disorder. She also would expect that other family members may experience similar problems.

— Jim Dryden



Pamela Madden

studied a sample of 4,639 adult twins from Australia to look at genetic influences on seasonal changes in mood and behavior.

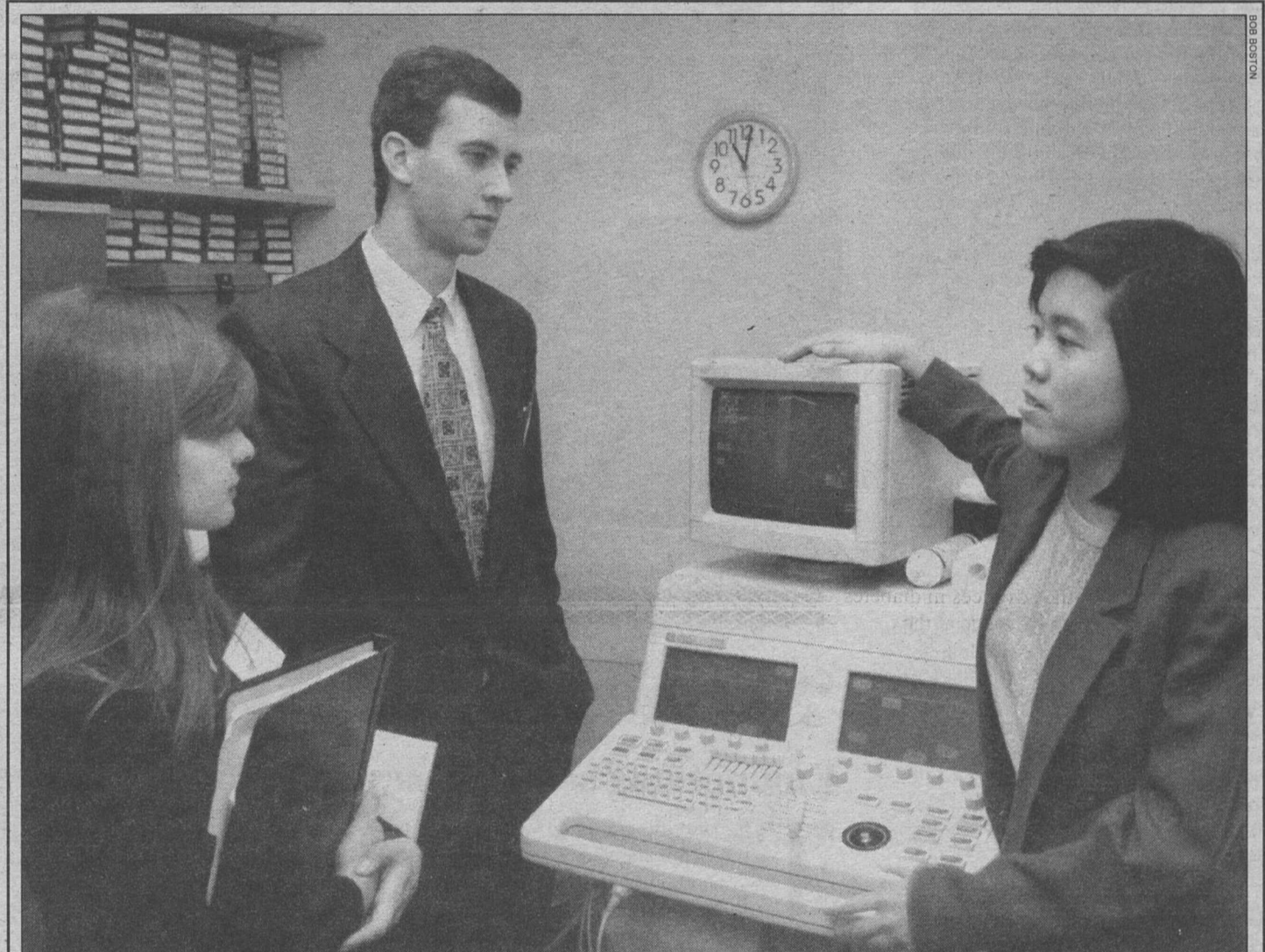
"An advantage to conducting a study on seasonality in Australia is

that their seasons are reversed — their winter occurs during our summer," said Madden. "This allowed us to distinguish the holiday blues from a winter form of seasonality."

She found that 13 percent of the twins in the sample reported that seasonality was a problem for them, but the number who had symptoms was higher. About 17 percent reported that they suffered from mood changes, weight gain and sleep problems during the winter. Only 2 percent of the sample reported the extreme degree of seasonality described by patients with SAD.

The sample included both identical and fraternal twins. Because identical twins share 100 percent of their genetic material and fraternal twins share about 50 percent, Madden said, the researchers expected to observe different levels of risk in identical and fraternal twins.

"We found that when one fraternal twin complained of symptoms of season-



On a tour of the Washington University Medical Center, fourth-year student Katherine Shiu, right, shows School of Medicine applicants Reena Awande and Alan Mullen a cardiac ultrasound machine in the echocardiology lab at St. Louis Children's Hospital. The machine is used to identify congenital heart disease in pediatric patients. Seniors give tours to about a thousand applicants each year.

Roy and Diana Vagelos endow biological chemistry chair

P Roy Vagelos, M.D., a leading figure in the pharmaceutical industry, and his wife, Diana, will endow a chair in biological chemistry at the School of Medicine.

By the end of 1999, they will have donated a total of \$1 million to establish the Roy and Diana Vagelos Professorship of Biological Chemistry in the Department of Biochemistry and Molecular Biophysics.

"Washington University deeply appreciates this generous donation," said Chancellor Mark S. Wrighton, Ph.D. "Named professorships provide an effective means to attract and retain the best faculty in the field, which is the goal of our institution."

Vagelos, former chairman and chief executive officer of Merck & Co. Inc., is chairman of the board of the University of Pennsylvania and of Regeneron Pharmaceuticals Inc.

"The School of Medicine is greatly honored to establish a chair bearing the distinguished name of Vagelos," said William A. Peck, M.D., executive vice chancellor for medical affairs and dean of the School of Medicine. "The endowment will further enhance the Department of Biochemistry and Molecular Biophysics, which has a strong tradition of excellence."

The commitment honors William H. and Elizabeth "Ibby" Danforth on the

occasion of their retirement as chancellor and first lady of Washington University.

"Dr. Vagelos has had an enormous influence on Washington University and its School of Medicine," said Danforth, chairman of the Board of Trustees. "I am honored that such an outstanding individual marked my retirement by endowing this chair."

Vagelos spent nine years at the School of Medicine, where he headed the Department of Biological Chemistry from 1966 to 1975. Building on 10 years of research at the National Institutes of Health in Bethesda, Md., he solved the puzzle of how fatty substances called lipids are made in cells. "His fundamental discoveries earned him an international reputation," said Gary K. Ackers, Ph.D., Wittcoff Professor and head of the biochemistry and molecular biophysics department. "He was one of the great leaders of a department that has a long history of major discoveries."

As an administrator, Vagelos increased options for Washington University students by founding the Division of Biology and Biomedical Sciences, which he directed until 1975. Recognizing that research and course work often cross departmental boundaries, the division encourages interdisciplinary interactions among faculty and oversees education in

the biological sciences at the Medical and Hilltop campuses.

Vagelos left Washington University in 1975 to become senior vice president of research at Merck, Sharp & Dohme Research Laboratories in Rahway, N.J., the research division of Merck & Co. Inc. He joined the company's board of directors in 1984 and served as chairman from 1986 to 1994. From 1985 to 1994, he also was Merck's president and chief executive officer.

Vagelos reached Merck's mandatory retirement age of 65 in November 1994. In October 1994, he became chairman of the Board of Trustees of the University of Pennsylvania and, in January 1995, chairman of the board of Regeneron Pharmaceuticals Inc., a small biotechnology company in Tarrytown, N.Y.

Vagelos received the American Chemical Society Award for outstanding achievements in enzyme chemistry in 1967. He was elected to both the National Academy of Sciences and the American Academy of Arts and Sciences in 1972.

Vagelos is a director of The Prudential Insurance Co. of America, of PepsiCo Inc., of McDonnell Douglas Corp. and of the New Jersey Performing Arts Center. He is a trustee of the Danforth Foundation.

Record

Editor: Deborah Parker, 935-5235, Box 1070
Assistant vice chancellor, executive director, University Communications: Judith Jasper

Executive editor: Susan Killenberg

Editor, medical news: Diane Duke, 286-0111, Medical School Box 8508

Assistant editors: Carolyn Sanford, 935-5293; Michael Slatin, 935-6603, Box 1070

Production: Galen Harrison

Record (USPS 600-430/ISSN 1043-0520), Volume 20, Number 19/Feb. 8, 1996. Published for the faculty, staff and friends of Washington University. Produced weekly during the school year, except school holidays, and monthly during June, July and August by the Office of Public Affairs, Washington University, Campus Box 1070, One Brookings Drive, St. Louis, Mo. 63130. Second-class postage paid at St. Louis, Mo.

Address changes and corrections:

Postmaster and non-employees: Send to Record, Washington University, Campus Box 1070, One Brookings Drive, St. Louis, Mo. 63130.

Hilltop Campus employees: Send to Office of Human Resources, Washington University, Campus Box 1184, One Brookings Drive, St. Louis, Mo. 63130.

Medical Campus Employees: Send to Payroll Office, Washington University, Campus Box 8017, 660 S. Euclid, St. Louis, Mo. 63110.

Washington
WASHINGTON UNIVERSITY IN ST. LOUIS

Washington People

Santiago helps diabetics help themselves

In the second grade, Julio V. Santiago's standardized-test scores were so low that his parents were called to the school for a meeting. The principal recommended that Santiago be sent to a school for children who were slow learners. But Santiago did not have a problem learning — he just couldn't speak English.

His parents had moved to New York City in 1949 after the sugar cane industry in Puerto Rico had gone bust. Santiago was the first Puerto Rican student in his school in New York's North Bronx.

"My father declined the school's offer to put me in a special school and created quite a fuss," Santiago said. By the time Santiago reached the fifth grade, he had mastered English and was among the class's brightest pupils.

Santiago, M.D., now is a professor of pediatrics and of medicine and director of the Division of Endocrinology and Metabolism in the Department of Pediatrics. Also the director of the School of Medicine's Diabetes Research and Training Center, one of only six in the nation, Santiago is internationally renowned for diabetes research.

Santiago was the principal investigator of the St. Louis portion of the Diabetes Control and Complications Trial (DCCT), considered one of the most important studies conducted in diabetes research. For decades, physicians debated whether strictly managing blood sugar levels in diabetics could slow the nerve, eye and kidney damage that accompanies the disease. In DCCT, researchers in this multicenter study concluded in 1993 that strictly controlling blood sugar levels does prevent or delay the ravaging complications of the disease.

In the late 1970s, Santiago was instrumental in many of the advances in diabetes treatment — which were made at the School of Medicine — that made the DCCT possible. In addition to developing the insulin pump, discovering the dangers of hypoglycemia and suggesting that patients could benefit from three to four insulin injections a day, the medical school was one of the first to integrate nurses, social workers and dietitians into the overall team-management approach to diabetes treatment and education.

In his many years in the field of diabetes, Santiago has become known for his work ethic, for being a consensus-builder and for knowing a great deal about many areas of diabetes research.

"Any task that he has taken on he has completed effectively," said Philip Cryer, M.D., professor in the Department of Medicine and director of its Division of Endocrinology, Diabetes and Metabolism, who met Santiago when the two were medicine residents at the medical school. "He has worked very hard for the constituency here at the medical school. A good example is his leadership at the Diabetes Research and Training Center."

Rodney Lorenz, an associate professor of pediatrics and director of the Division of Pediatrics Endocrinology at Vanderbilt University in Nashville, Tenn., has known Santiago for 15 years and worked with him in the DCCT. "One thing that's impressive about Julio is the breadth of his interest in the area of diabetes," Lorenz said. "He's able to converse on a wide variety of topics, all the way from the behavioral aspects of diabetes and psychosocial problems to the molecular biology of diabetes."

Work ethic developed in childhood

Making good grades, helping oneself and working hard were lessons Santiago learned as an immigrant in New York. He believes those lessons molded who he is today.

Although Santiago had planned to attend the Bronx High School of Science, his parents quashed the idea because they didn't like the grubby appearance of the school's students on the subway. Instead, Santiago was sent to an all-male Catholic high school. "My dad liked the short Whitey Herzog haircut, and suit jackets were required in some of the Catholic schools," Santiago said. "So in order to get me into some sort of a discipline, my parents decided I was going to switch over to Catholic schools."

Santiago discovered at a young age that his parents were much more lenient if he did well in school. "I found out my parents had this ethic that you could do almost anything if you had good grades," he said. "I could get out of doing housework if I brought home A's, and my success was measured by whether or not I was a good student."

He spent many hours studying the classics for his

honors classes while at the old Madison Square Gardens, waiting in the cheap seats to see the Knickerbockers or the Rangers. "You needed to get there about two hours early so you could have a seat that would allow you to see at least three-fourths of the rink. Since I had two hours to kill, I spent a lot of time translating Caesar's 'Gaelic Wars,' Cicero's 'De Sanectutem' and other works."

are evident today. "He has a certain proselytizing instinct of improving whatever he participates in. And he is a very hard worker. He still maintains a very heavy load of teaching, research and clinical activities," Kipnis said.

After graduating first in his class from medical school in 1967, Santiago contacted Kipnis and the late Carl Moore, M.D., whom he also met in Puerto Rico, and was offered a residency at the School of Medicine.

Drafted during the Vietnam War

However, the Vietnam War intervened, and Santiago was drafted into the U.S. Army. For the next two years, he was a physician/captain in the demilitarized zone in Korea.

He started his medical residency at the School of Medicine in 1970 under Moore. "During my years as a resident, there was a tremendous amount of stimulation in the faculty, from the fellow residents and from the students," he said. "Many world-famous people were training here or doing fellowships." He trained with Larry Shapiro, now chair of the Department of Pediatrics at the University of California, San Francisco; Cryer; Jeff Rosenfeld, a world-famous endocrinologist at the University of California, San Diego; and Jeff Gordon, M.D., Alumni Professor and head of the Department of Molecular Biology and Pharmacology and professor of medicine at the School of Medicine, to name a few.

In 1973, Kipnis was named head of the Department of Medicine — a post he held until 1992 — and Santiago became his chief resident. Santiago describes that year as one of the most rewarding of his life because he orchestrated much of the instruction of the third- and fourth-year medical students during their rotations.

After working in the pediatrics diabetes lab for two years, he joined the School of Medicine faculty in 1975 as an assistant professor of pediatrics.

At this point in his life, he also had the option of setting up a diabetes section at the local Veterans Administration Hospital. But because of his experience during the Vietnam War, he decided against it. "All of us who served in the military during that era were permanently changed. The thought of going to the VA and having to deal with those mangled bodies of the war was quite anxiety-

provoking and depressing to me," he said.

The decision to go into endocrinology as a specialty was a fairly easy one for Santiago. During medical school, he had completed a three-month elective at Babies' Hospital, which is affiliated with Columbia University in New York. At Babies' Hospital, his first patient had diabetic ketoacidosis and a rare fungal disease that, at the time, almost always was fatal. "But because of the facilities at Columbia University, she was one of the earliest survivors of mucormycosis," he said. "The satisfaction that I gained from that one patient and the influence of my teachers, who were outstanding endocrinologists, helped me decide to go into diabetes."

Transferring responsibility of care

In the past 20 years, Santiago said, there's been an explosion in the field of diabetes, both in research and in patient care. "During this period, a lot of research was conducted that has made a difference in the way we care for patients with diabetes," he said.

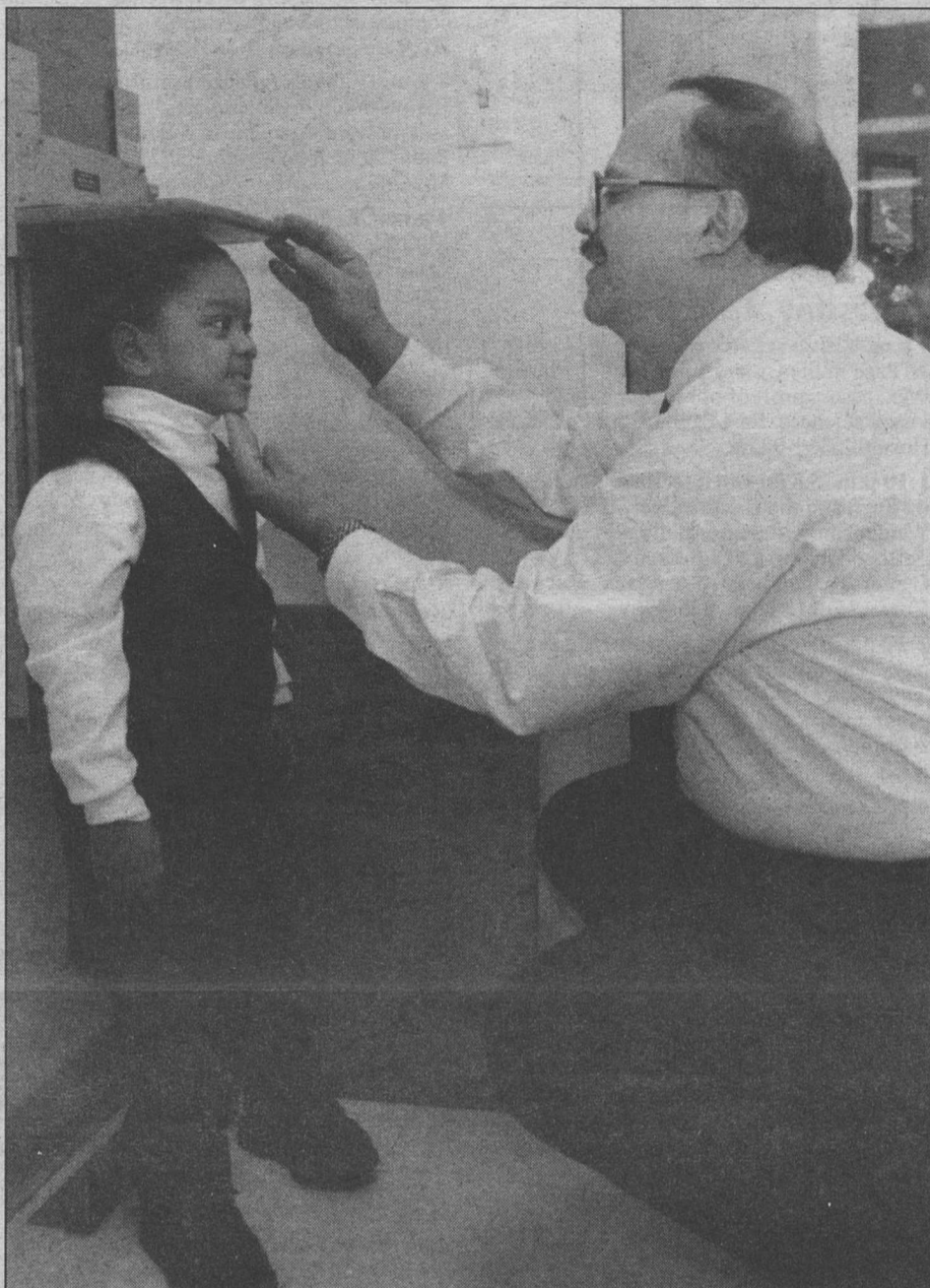
Near the beginning of this era, the Diabetes Research and Training Center was established in 1977 at Washington University. It was one of only five centers awarded initially in the United States.

During the early years of the center, Santiago said, he spent much of his time becoming a teacher not of medical students and of residents but of patients. "We learned that our job was not to drive a bus and take diabetics from Point A to Point B but to teach them how to drive their own vehicles and sort of autopilot themselves," he said. "We had to transfer more of the responsibility of diabetes management from the manager to the managed (patient)."

As a result, health-care professionals at the Diabetes Research and Training Center became experts in interdisciplinary training. Their goal was to foster independence in patients with diabetes and empower them to control their lives.

Self-empowerment also was a lesson Santiago had learned as a child in the Bronx. "People should strive to do things for themselves. This attracted me to medicine — really wanting to help people but discouraging a dependent relationship. It's important to teach people to care for themselves."

— Diane Duke



Julio V. Santiago, M.D., measures the height of Dereke C. Jamerison.

"People should strive to do things for themselves. This attracted me to medicine — really wanting to help people but discouraging a dependent relationship."

To keep him out of trouble during the summers in New York, his parents often sent Santiago to stay with relatives in Puerto Rico. Spending time there also helped Santiago seek an identity. He struggled with who he was because, in New York, the neighborhoods in which his Catholic family lived were predominantly Jewish. "It wasn't until I was taking some sociology classes in college that the awareness that I was not Jewish — that I was Puerto Rican and therefore different — fully hit me," he said.

After majoring in pre-medicine at Manhattan College in the Bronx, Santiago's search for an identity, low tuition and scholarship money also compelled him to return to Puerto Rico for medical school. He was accepted at several high-ranked U.S. medical schools but decided to return to Puerto Rico because he was able to get a full scholarship to the University of Puerto Rico. He also had just married Anna, a Puerto Rican woman from Jersey City, N.J., whom he met in college. She now works with him as a coordinator of a large diabetes-prevention trial.

David Kipnis, M.D., Distinguished University Professor of Medicine and professor of molecular biology and pharmacology, met Santiago in 1964 when Kipnis was a visiting professor at the University of Puerto Rico School of Medicine. Kipnis said some of the talents and personal attributes he saw in Santiago as a medical student still

Calendar

Feb. 8-17



Exhibitions

"Versions of the Self: The Poetry of John N. Morris." Books and manuscripts tracing the career of Morris, a retired English professor. Through March 1. Special Collections, Olin Library, Level Five. Hours: 8:30 a.m.-5 p.m. weekdays. 935-5495.

"MetroLines: Transit Poetry From Around the World." Through February. International Writers Center, West Campus Conference Center. Hours: 8:30 a.m.-5 p.m. weekdays. 935-5576.

"Lifting the Veil: Robert S. Duncanson and the Emergence of the African-American Artist." More than 50 paintings, manuscripts, newspapers, books and drawings from all periods of Duncanson's career. Through March. Gallery of Art, Steinberg Hall. Hours: 10 a.m.-5 p.m. weekdays; 1-5 p.m. weekends. 935-5490.



Films

All Filmboard movies cost \$3 and are shown in Room 100 Brown Hall. For 24-hour hotline, call 935-5983.

Thursday, Feb. 8

7:30 p.m. French Film Series. "Les Diaboliques" (1955), with English subtitles. Room 162 McDonnell Hall. 726-1565.

Friday, Feb. 9

4 p.m. Contemporary American Documentary Film Series. "Mo Funny" (1993), a documentary on the history of African-American comedy. Presented by Catherine Rankovic, instructor in African and Afro-American studies. Room 149 McMillan Hall. 935-5216.

7 and 9:30 p.m. Filmboard. "Easy Rider" (1969), starring Peter Fonda. (Also Feb. 10, same times, and Feb. 11 at 7 p.m.)

Midnight. Filmboard. "The Wild One" (1954), starring Marlon Brando. (Also Feb. 10, same time, and Feb. 11 at 9:30 p.m.)

Monday, Feb. 12

8 p.m. Filmboard. "Nashville" (1975), directed by Robert Altman. (Also Feb. 13, same time.)

Tuesday, Feb. 13

7 p.m. Chinese Film Series. "Hibiscus Town" (1986), with English subtitles. Room 219 South Ridgley Hall. 935-5156.

Thursday, Feb. 15

7:30 p.m. French Film Series. "Delicatessen" (1991), with English subtitles. Room 162 McDonnell Hall. 726-1565.

Calendar guidelines

Events sponsored by the University — its departments, schools, 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, title of event, name of speaker(s) and affiliation(s), and admission cost. Quality promotional photographs with descriptions are welcome. Send items to Judy Ruhland at Campus Box 1070 (or via fax: 935-4259). Submission forms are available by calling 935-4926.

The deadline for all entries is noon Tuesday one week prior to publication. Late entries will not be printed. The Record is printed every Thursday during the school year, except holidays, and monthly during the summer. If you are uncertain about a deadline, holiday schedule or any other information, please call 935-4926.

Friday, Feb. 16

7 and 9:30 p.m. and midnight. Filmboard. "Monty Python & The Holy Grail" (1975), starring Terry Gilliam and Terry Jones. (Also Feb. 17, same times.)



Lectures

Thursday, Feb. 8

1 p.m. Vision science seminar. "Vacuolar ATPase in the Ciliary Epithelium," Martin Wax, assoc. prof. of ophthalmology and visual sciences. East Pavilion Aud., Barnes Hospital. 362-3726.

1:10 p.m. Social work lecture. "The Family Firm and the Bamboo Network," Murray Weidenbaum, Edward Mallinckrodt Distinguished University Professor and chair, Center for the Study of American Business. Brown Hall Lounge. 935-4909.

2:30 p.m. Mechanical engineering seminar. "The h-p Finite Element Modeling of Thin Structures," Manil Suri, prof., Dept. of Mathematics and Statistics, U. of Maryland, Baltimore. Room 100 Cupples II Hall. 935-6055.

4 p.m. Substance abuse lecture. "Alcohol and Drug Abuse in the 21st Century," Wilson M. Compton III, asst. prof. of psychiatry and director, Chemical Dependency Services, Barnes-Jewish Hospital. May Aud., Simon Hall. A reception will follow. 935-5151.

4:30 p.m. Math colloquium. Topic to be announced. Vladimir Ezhov, prof. of mathematics, U. of Adelaide, Australia. Room 199 Cupples I Hall. 935-6726.

Friday, Feb. 9

9:15 a.m. Pediatric Grand Rounds. "Collectin Mediated Pulmonary Host Defense: Structure and Functional Characterization of Surfactant Protein D," Edmond C. Crouch, prof. of pathology. Clopton Aud., 4950 Children's Place. 454-6006.

Noon. Cell biology and physiology seminar. "Renal Stem Cells and Nephrogenesis," Doris Herzlinger, asst. prof., Dept. of Physiology, Cornell U. Medical College, Ithaca, N.Y. Cell Biology Library, Room 426 McDonnell Medical Sciences Bldg. 362-6950.

Noon. Environmental engineering seminar. "Brownfield Redevelopment," C. George Lynn, vice president, CH2M Hill, St. Louis. Room 216 Urbauer Hall. 935-8590.

3 p.m. Gallery talk. "Lifting the Veil," an informal discussion of the Robert S. Duncanson exhibit with Stacey Robinson, a graduate student who helped prepare materials for the exhibit. (See Exhibitions, this page.) Gallery of Art, upper gallery, Steinberg Hall. 935-5490.

Saturday, Feb. 10

10:30 a.m. Art history and archaeology lecture. "Courbet's Burial at Ornaux: A New Reading," Franz Zelger, prof., U. of Zurich, Switzerland. Room 200 Steinberg Hall. 935-5287.

11 a.m. University College Saturday Seminar. "National Parks as Political Goods," William Lowry, assoc. prof. of political science. Room 362 McDonnell Hall. 935-6788.

Monday, Feb. 12

4 p.m. Biology seminar. "Impact of Generalist Predators in Food Webs," David Spiller, assoc. specialist, section of evolution and ecology, Division of Biological Sciences, U. of California, Davis, and ecology search candidate in biology. Room 322 Rebstock Hall. 935-6860.

4 p.m. Immunology seminar. "Blocking of Tumor Dissemination by Reagents Antagonizing CD44," David Naor, Hebrew U., Lautenberg Center for General and Tumor Immunology, Hadassah Medical School, Jerusalem. Third Floor Aud., St. Louis Children's Hospital. 362-8748.

Tuesday, Feb. 13

10 a.m. Biology seminar. "Extinction and Colonization of Spider Populations on Islands: Relevance to Conservation Biology," David Spiller, assoc. specialist, section of evolution and ecology, Division of Biological Sciences, U. of California, Davis, and ecology search candidate in biology. Room 202 Life Sciences Bldg. 935-6860.

4 p.m. Diabetes research seminar. "iNOS Expression by Human Islets," John Corbett, asst. prof. of biochemistry, Saint Louis U. Pathology Library, Room 3723 West Bldg. 362-7435.

4 p.m. Chemistry seminar. "Simultaneous Multiple Synthesis by the Multi-pin Method: Ques for Solid Phase Organic Chemistry and Reaction Optimization," Andrew Bray, senior scientist, Chiron Mimotopes, Australia. Room 311 McMillan Lab. 935-6530.

Wednesday, Feb. 14

6:30 a.m. Anesthesiology Grand Rounds. "Coagulation Cascade: Old, New and Unproven," George Broze Jr., prof. of medicine and of cell biology and physiology. Wohl Hospital Bldg. Aud., 4960 Children's Place. 362-6978.

8 a.m. Obstetrics and Gynecology Grand Rounds. "Thyroid Disease," Mark Schnee, chief resident, Dept. of Obstetrics and Gynecology. Clopton Aud., 4950 Children's Place. 454-7886.

11 a.m. Assembly Series. Lock and Chain Lecture. "Parallel Time: Growing Up in Black and White," Brent Staples, editorial board, The New York Times, and author. Graham Chapel. (See story, page 5.) 935-5285.

Thursday, Feb. 15

1 p.m. Vision science seminar. "The Role of the Lens in Organizing the Anterior Segment During Ocular Development," David C. Beebe, Jules and Doris Stein Research to Prevent Blindness Professor of ophthalmology and visual sciences. East Pavilion Aud., Barnes Hospital. 362-3726.

1:10 p.m. Social work lecture. "Black Wealth/White Wealth: Assets and Race in America," Thomas Shapiro and Melvin Oliver, authors of "Black Wealth/White Wealth." Brown Hall Lounge. (See story, page 5.) 935-7433.

4 p.m. Chemistry seminar. "De Novo Protein Design: A New Approach to Materials Chemistry," David A. Tirrell, prof. of chemistry, U. of Massachusetts, Amherst. Room 311 McMillan Lab. 935-6530.

4 p.m. Earth and planetary sciences colloquium. "Carbon Isotopic Evidence for the Evolution of Earth's Early Biosphere," David J. Des Marais, research scientist, Ames Research Center, Moffett Field, Calif. Room 362 McDonnell Hall. 935-5610.

4 p.m. Molecular oncology seminar. "Involvement of a Nucleoporin in Myeloid Leukemia With + (6;9)," Gerard Grosveld, chair, Dept. of Genetics, St. Jude's Children's Research Hospital, Memphis, Tenn. Third Floor Aud., St. Louis Children's Hospital. 362-9035.

Friday, Feb. 16

9:15 a.m. Pediatric Grand Rounds. "Clinical and Molecular Investigations of a Pancreatic Cancer-prone Family," Paul J. Goodfellow, assoc. prof. of surgery, and Alison Whelan, asst. prof. of pediatrics. Clopton Aud., 4950 Children's Place. 454-6006.

Noon. Cell biology and physiology seminar. "The Retinoblastoma Protein and GI Phase Cell Cycle Control," Steven F. Dowdy, asst. prof. of pathology. Cell Biology Library, Room 426 McDonnell Medical Sciences Bldg. 362-6950.

Noon. Environmental engineering seminar. "Motor Vehicle Emissions and Potential Revisions to the Particulate Matter National Ambient Air Quality Standards," Jay R. Turner, asst. prof. of engineering and policy. Room 216 Urbauer Hall. 935-8590.

4 p.m. Music lecture. "No Pagodas in Our Temples: The French Operatic Canon circa 1764," Antonia Banducci, WU alumna and asst. prof. of music history, U. of Denver. Room B-8 Blewett Hall. 935-5581.

Saturday, Feb. 17

11 a.m. University College Saturday Seminar. "Public/Private Spaces in Ameri-

can Law," Stuart Banner, assoc. prof. of law. Room 362 McDonnell Hall. 935-6788.



Music

Sunday, Feb. 11

4 p.m. Voice recital. Featuring soprano Jeanenne Lambert, a candidate for a master's degree in voice, and Gail Hintz, piano. Program: Claude Debussy's "Fêtes galantes" and works of Mozart, Hugo Wolf, Gabriel Fauré, Reynaldo Hahn and Thomas Pasatieri. Graham Chapel. 935-5581.

Saturday, Feb. 17

8 p.m. Voice recital. Featuring soprano Melinda Block, a senior art major. Block also will present a display of her artwork, which is representative of the musical program. Program: "Five Short Songs on Women's Names" by Arthur Honegger, "The Cloisters" by John Corigliano, "Méamorphoses" by Francis Poulenc, and "Despite and Still" cycle by Samuel Barber. Steinberg Hall Aud. 935-5581.



Performances

Friday, Feb. 9

8 p.m. Edison Theatre's "OVATIONS!" series presents jazz saxophonist Joshua Redman in a quintet. Cost: \$20 for the general public; \$16 for senior citizens and WU faculty and staff; and \$11 for WU students. Edison Theatre. 935-6543.

Sunday, Feb. 11

7 p.m. Prose and music performance. "Black Identity: Reflections of Blackness." Features works by Spike Lee, August Wilson, Paul Laurence Dunbar and Billie Holiday that focus on black identity. Cost: \$7 for the general public and \$5 for WU faculty, staff and students. Edison Theatre. (See story, page 5.) 935-6679.

Friday, Feb. 16

8 p.m. Edison Theatre's "OVATIONS!" series presents the Black Light Theatre of Prague's version of "Peter Pan." (Also Feb. 17, same time.) Cost: \$20 for the general public; \$16 for senior citizens and WU faculty and staff; and \$11 for WU students. Edison Theatre. 935-6543.

8 p.m. Performing Arts Dept. presents "The Double Inconstancy," a Pierre Carlet de Marivaux romantic comedy. (Also Feb. 17, same time.) Cost: \$8 for the general public and \$6 for senior citizens, all students and WU faculty and staff. Drama Studio, Room 208 Mallinckrodt Center. 935-6543.



Miscellany

Cultural Celebration events continue. Remaining events are: "I Remember Harlem," performed by the St. Louis Black Repertory Company at 7 p.m. Feb. 8 in Graham Chapel; and Jook Joint, a celebration of American music with the Willie Akins Quartet and The Big Band from 9 p.m.-1 a.m. Feb. 9 in The Gargoyle, Mallinckrodt Center. 935-2306 or 935-2887.

Career Week events continue. "Learn and Discover" features a series of workshops, panel discussions and events focusing on career exploration. Activities, held at various locations on campus, continue through Feb. 9. Open to the WU community only. 935-5930.

Thursday, Feb. 8

Noon. Group tour. The International Student Resource Group will tour the Ford Motor Co. assembly plant. Meet at Stix International House. To sign up, call 935-4787.

4 p.m. Jewish Awareness Month event. A Jewish meditation mini-course with Rabbi James Stone Goodman, Neve Shalom Congregation. (Also Feb. 15, same time.) Cost: \$5. Women's Bldg. Lounge. 726-6177.

Friday, Feb. 9

Mitzvah Corps outing deadline. Visits to the Jewish Center for the Aged, Ecumenical Housing and the Grace Hill Neighborhood Shelter are planned for 11:30 a.m.-3 p.m. Feb. 18. Register at Hillel Center, 6300 Forsyth Blvd. 726-6177.

Saturday, Feb. 10

Hillel Center Special Olympics volunteer sign-ups. The Jewish Student Council Sports Special Olympics Buddy Team needs volunteers to cheer on their special athletes. For more info., call 935-1278.

9:30 a.m.-noon. Art workshop. Find out what's happening in the mail-art network. Room 104 Bixby Hall. Cost: \$35. To register, call 935-4643.

Sunday, Feb. 11

Noon. Poetry reading. "Poetry of Love and Hate," in anticipation of Valentine's Day. Craft Alliance, 6640 Delmar Blvd. (See story, this page.) 935-5576.

Monday, Feb. 12

9 a.m.-5 p.m. Literary reading. "Lawd Today" by Richard Wright. An all-day reading of the book. Campus Bookstore, Mallinckrodt Center. 935-5690.

3:15 p.m. Art awards ceremony. The 18th Annual High School Art Competition. Sponsored by the School of Art. Steinberg Hall Aud. (An opening reception for the exhibit will be held from 3-5 p.m. in Bixby Gallery, Bixby Hall.) 935-6597.

7 p.m. Women's presentation and discussion. "Do Nice Girls Finish Last? Empowering Women in the Work Force." Rosemary Agonito, gender-equity consultant and author of "No More Nice Girls." (A dessert reception will follow in Holmes Lounge, Ridgley Hall. Professional St. Louis women will share how they overcame barriers on the road to success.) Graham Chapel. 935-2715.

Tuesday, Feb. 13

Noon-1 p.m. Weight Watchers open house. Learn about the "Weight Watchers at Work" program. Register for a 10- or 20-week Weight Watchers session to lose weight at work. Room 241 Simon Hall. For more info. and to register, call 935-6369.

Thursday, Feb. 15

Deadline for abstracts for graduate student research symposium. Poster presentations will be displayed in the hallway in McDonnell Hall on March 23. To participate, submit a brief abstract to the Graduate Student Senate, Campus Box 1187, or contact your Graduate Student Senate representative. 725-1273.

Friday, Feb. 16

5:45 p.m. Hillel Center partnership dinner. Featured guests are Hillel's board of directors and their families who wish to meet with and hear from members and prospective members in order to help Hillel Center grow and improve. Cost: \$7 for members and \$8.50 for non-members. Hillel Center, 6300 Forsyth Blvd. For more info. and to make reservations by Feb. 15, call 726-6177.

Saturday, Feb. 17

10-11:30 a.m. Art workshop. "Unusual Children's Books," Charlotte Johnson, book artist and librarian at Southern Illinois U.-Edwardsville. Room 104 Bixby Hall. Cost: \$15. To register, call 935-4643.

6 p.m. Woman's Club event. "University Night Dinner Dance," featuring folk dancing and masquerading with the International Folk Dance Association of University City. Guests are encouraged to wear costumes and/or masks. Open to WU community only. Cost: \$17.50. Holmes Lounge, Ridgley Hall. To make reservations by Feb. 12, call 725-0372 or 862-4569.

Journalist Brent Staples to speak

Journalist and author Brent Staples will give the Lock and Chain Lecture at 11 a.m. Wednesday, Feb. 14, in Graham Chapel. His lecture, titled "Parallel Time: Growing Up in Black and White," is part of the Assembly Series and is free and open to the public.

Staples is the author of the 1994 memoir "Parallel Time: Growing Up in Black and White," an exploration of the sharply diverging life courses of the author and his brother. Staples went on to a successful academic and professional career, while his brother met an early, violent death on America's streets. In this highly personal memoir, Staples wrestles with notions of character and opportunity, background and assimilation.

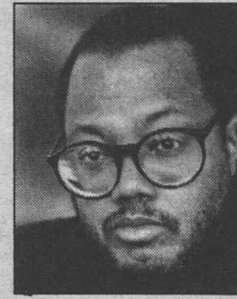
Since 1990, Staples has served on the editorial board of The New York Times. Prior to that appointment, he was assistant metropolitan editor (1987 to 1990) and editor of The New York Times Book Review (1985-87). He began his journalistic career as a free-lance reporter and jazz and

literature critic. His first newspaper appointment was as a staff reporter with the Chicago Sun-Times from 1983-85.

Staples earned a bachelor's degree in behavioral science in 1973 from Widener University in Chester, Pa. After receiving a master's degree in psychology in 1976 from the University of Chicago, he won a Danforth Fellowship for advanced study for his doctorate in psychology, which he received in 1982 from the University of Chicago.

Staples' lecture is co-sponsored by the African and Afro-American Studies Program in Arts and Sciences, the Assembly Series, Lock and Chain and Student Union.

For more information, call 935-5285.



Brent Staples

Alumni to lecture on black, white wealth

Sociology alumni Melvin L. Oliver and Thomas M. Shapiro will discuss their new book on personal wealth and racial inequality during a free public lecture at 1:10 p.m. Thursday, Feb. 15, in Brown Hall Lounge.

Oliver and Shapiro are co-authors of "BLACK WEALTH/WHITE WEALTH: A New Perspective on Racial Inequality," recently released by Routledge Press of New York City. One reviewer called the book a "tour de force that will revolutionize our thinking about the entire range of issues from the historical legacy of slavery to contemporary patterns of housing segregation."

Based on quantitative data from more than 12,000 households and in-depth interviews with a range of black and white families, the book documents deep and persistent racial differences in the personal wealth of Americans. The authors examine how and why systematic barriers — such as low black entrepreneurship, limited access to capital, redlining practices, local and state policies, the rise of suburbs and the making of the urban ghetto — have impaired the ability of many blacks to accumulate wealth and find a better life.

Among those mentioned in the book's dedication is the late Robert

Boguslaw, a professor of sociology at Washington University from 1966 to 1985 who taught and influenced Shapiro and Oliver during their graduate education here, Shapiro said.

Oliver earned master's and doctoral degrees in sociology from Washington University in 1974 and 1977. He is a professor of sociology and policy studies and the director of the Center for the Study of Urban Poverty at the University of California, Los Angeles.

Shapiro, an associate professor of sociology and anthropology at Northeastern University in Boston, earned master's and doctoral degrees in sociology from Washington University in 1971 and 1978. He is the author of "Population Control Politics: Women, Sterilization and Reproductive Choice."

The visit of Oliver and Shapiro to Washington University is co-sponsored by the George Warren Brown School of Social Work's Center for Social Development and the African and Afro-American Studies Program in Arts and Sciences. The Campus Bookstore will sell copies of the book outside Brown Hall Lounge before and after the event, and the authors will sign books from 2:30 to 3 p.m. For information, call 935-7433.

Sports

Compiled by Mike Wolf, director, and David Moessner, assoc. director, sports information.

Bears extend streak of home wins to 18

Led by the scoring and rebounding efforts of senior forward Brent Dalrymple, the Washington University men's basketball team extended its winning streak at the Field House to a school-record 18 games with wins over Fontbonne College and the University of Rochester (N.Y.). Dalrymple, who totaled 27 rebounds in the two games, became the Bears' all-time leading rebounder in the 82-74 win over Rochester, surpassing previous leader Jon Bergman (1984-88). Dalrymple now has 697 rebounds for his career. He also paced the Bears offensively, scoring a game-high 20 points. In the Bears' 91-62 non-conference win over Fontbonne, sophomore center Matt Greear, filling in for the injured Kevin Folkl, scored a team-high 18 points.

Current record: 15-5 (8-1 University Athletic Association)

This week: 6 p.m. Friday, Feb. 9, at Emory University (Atlanta); 3 p.m. Sunday, Feb. 11, at Carnegie Mellon University (Pittsburgh)

Women hoopsters lengthen win streaks

Rolling to a pair of blowout victories, the WU women's basketball team extended its overall win streak to six games and its UAA home string to 35 wins. After toppling Fontbonne College 68-44 and the University of Rochester 78-54, the Bears have further positioned themselves for runs at the UAA crown and a seventh-consecutive NCAA tournament bid. Among last week's standouts were senior captain Jennifer Kennish, who charted career-highs with 12 points, 10 rebounds and three steals against Fontbonne, and freshman Emily Nolan, who rung up a career-best 14 points.

Current record: 15-4 (8-1 UAA)

This week: 8 p.m. Friday, Feb. 9, at Emory University; 1 p.m. Sunday, Feb. 11, at Carnegie Mellon University

Swim teams drown UAA rival Chicago

Leaving UAA rival University of Chicago in its wake, the WU men and women's swimming and diving teams both blistered the Maroons in dual meets. The women, led by a pair of individual wins from junior Shay Upadhyaya and sophomore Liz Burrow, emerged with a 114-84 victory. The men, paced by double-win performances by junior Jason Price and freshman Chad Nelson, produced a 125-76 conquest.

Current record: men 7-2, women 3-3

This week: 1 p.m. Saturday, Feb. 10, vs. Principia College (Elsah, Ill.), Millstone Pool, Field House

Indoor track squads place second in tourney

With another two school records falling on the women's side, the WU indoor track and field teams each produced second-place showings at the 12-team Illinois Wesleyan University Invitational in Bloomington, Ill. Rewriting the record books were freshman Monica Lewis, who registered a 27.05-second clocking while finishing second in the 200-yard dash, and junior Alyce Nelson, who bettered her own mark with a 5-foot, 2-inch fourth-place showing in the high jump. Among the men's highlights was the triumvirate of senior Kenneth Walker and sophomores Marcus Walker and Brad Klein, each skying 44 feet in the triple jump.

This week: 11 a.m. Saturday, Feb. 10, at Illinois Wesleyan Indoor Invitational, Bloomington, Ill.

Black identity focus of history month event

In commemoration of February as Black History Month, "Black Identity: Reflections of Blackness," a program of prose and music, will be held at 7 p.m. Sunday, Feb. 11, in Edison Theatre.

"Black Identity: Reflections of Blackness" will feature performances by black students at Washington University. A variety of works focusing on black identity will be presented, including those by filmmaker Spike Lee, playwright August Wilson, poet and author Paul Laurence Dunbar and singer Billie Holiday. Brent E. Gilmore, a junior majoring in English literature in Arts and Sciences, is the director of the production. Kristy L.

McDowell, a senior majoring in biology and African and Afro-American studies in Arts and Sciences, is the coordinator.

The program is sponsored by the Division of Student Affairs, with support from several University student groups and departments.

Tickets are \$5 for all students and University faculty and staff and \$7 for the general public. Group rates also are available.

For more information about tickets, call the Edison Theatre box office at 935-6543. For more information about the program, call 935-6679.

Love, hate theme of poetry reading

The International Writers Center in Arts and Sciences and River Styx will present a poetry reading from noon to 1 p.m. Sunday, Feb. 11, at Craft Alliance, 6640 Delmar Blvd., as part of A&E Weekend.

In anticipation of Valentine's Day, "Poetry of Love and Hate" will be read by local poets Jane Ellen Ibur, Steve Schreiner, Eddie Silva and Brian Taylor. Washington University graduate students Joy Katz and Jonathan Smith also will read. Poems by Shakespeare, Donne and Bishop will be read, as will poems written by the featured poets.

This is the second year for A&E Weekend, in which many St. Louis arts organizations present programs to showcase their events for the general public. All events are free and are pre-

sented in different locales — from Powell Symphony Hall to the Katherine Dunham Museum at Southern Illinois University at Edwardsville. There will be more than 100 performances, exhibits and hands-on activities at 20-plus sites. The nonprofit Arts and Education Council of Greater St. Louis raises funds for more than 150 arts, cultural and arts-education organizations in the bi-state area. The council encourages quality programming and the wide availability of arts and arts-education programs to everyone in the bi-state community.

For more information about the poetry reading, call Lorin Cuoco at 935-5576. For information about A&E Weekend, call Linda King at 535-3600.

Internet makes book renewal easier

Patrons of the Washington University Libraries who have checked out materials now may renew their selections via the information superhighway.

University Libraries has made available on its home page an electronic renewal form that eliminates the need to walk over to one of the libraries to renew books. Instead, patrons can jump on the World Wide Web from their offices or homes, fill out the electronic form and, with the click of a mouse, send the form to the University Libraries, where personnel will renew the materials.

Shirley K. Baker, vice chancellor for information technology and dean of University Libraries, said the electronic renewal form came about as a response to patrons who were sending informal electronic-mail messages asking that their books be renewed. In fact, Baker said, about one-third of all renewals processed by University Libraries were being requested by patrons through e-mail.

As a result, University Libraries created a formal electronic renewal form to streamline the process.

Jon R. Kerckhove, senior technical assistant with University Libraries, created the proposal for the design of the form, and Grant L. Weber, systems programmer, implemented it.

The electronic form allows patrons to renew as many as 12 items; multiple forms may be filled out for more than 12 items. The on-line form is not intended for renewal of reserve materials.

The form asks users to supply their names, University identification numbers, e-mail addresses and campus box numbers. Users also will need to supply

the call number and bar-code number for each item they wish to renew. Patrons need to mark the library in which the items are held so the request form can be funneled to the appropriate circulation desk. In addition, patrons should use a separate form for each library from which they have checked out books.

The form will allow users to renew items that have been checked out of these libraries: Olin, Art and Architecture, Biology, Al and Ruth Kopolow Business, Chemistry, Earth and Planetary Sciences, East Asian, Mathematics, Gaylord Music, Gustavus A. Pfeiffer Physics, Social Work and West Campus.

The on-line renewal form may not be used for items checked out of the Law Library or The Bernard Becker Medical Library.

While there is no formal mechanism in place for renewing Law Library materials on line, renewal requests can be sent to Mark Kloempken, public services librarian, at e-mail mskloemp@server.wulaw.wustl.edu. Patrons need to include their complete names and Law Library card numbers, as well as the title and call number of each volume they wish to renew.

Although the medical library does not have an on-line renewal form, it has had for a long time electronic forms for other types of services, such as requests for interlibrary loans, photocopies, database searches and answers to reference questions, said Mark E. Frisse, M.D., associate dean and director of the medical library.

Baker said similar versions of these types of forms could be on the horizon for the other libraries, too.

— Michael Slatin

Here's how to access the University Libraries' on-line renewal form

The electronic renewal form can be accessed from the University Libraries' home page (<http://library.wustl.edu>). Once you've reached the home page, click on the entry titled "Using the Libraries at Washington University." This will take you to a page titled "About the Libraries at Washington University."

Click on the entry "Circulation Services," which can be found under the heading "John M. Olin Library." This will take you to a new page. Then click on the entry "Renewals," which can be found under the heading "The Circulation Unit." After a new page appears, click on the entry "Renew your books here!" The electronic form then will appear on the screen.

The renewal form also can be accessed through WorldWindow. To access WorldWindow, go to the libraries' home page and click on the entry titled

"WorldWindow." You will be asked to supply a user name and a password; type "guest" for both and click on "OK." This will take you to a screen labeled "Standard Resources."

Then type "renew" where it says "Enter Keywords to search for" and then click on "Search." This will take you to a new screen, where you should click on the item "On-line renewal form," which will take you to the form.

Patrons who do not have World Wide Web access can dial into WorldWindow using their modems. The number is 935-8172. Follow the directions on the screen until you come to a menu listing of several options, one of which is to perform a keyword search. Then do a search using the word "renew."

If you have trouble accessing the form, call circulation at 935-5420.

Ketner to lecture on early African-American art

Joseph Ketner, director of the Washington University Gallery of Art, will teach a five-lecture course in February and March on early African-American art. The gallery is hosting the course with OASIS, a non-profit group that offers educational programs for people 55 and older.

The class, which meets from 10 to 11 a.m. on five consecutive Wednesdays

starting Feb. 14, will be held in Steinberg Hall Auditorium.

Ketner will focus on the gallery's current exhibit, "Lifting the Veil: Robert S. DuCanson and the Emergence of the African-American Artist," which centers on the renowned 19th-century painter and is on display through March.

The course fee is \$5. For more information or to register, call 539-4555.

Genes may provide disease clues — from page 1

"milepost markers" that notify scientists where genes are located. This information should speed the pace at which geneticists identify genes of known and unknown function.

"We will get a lot of genes out of this project that we still will not know anything about," said Richard K. Wilson, Ph.D., research associate professor of genetics. "But we can take those bits of DNA and use them as probes to compare worm, mouse and human DNA sequences."

This effort, which underscores the importance of mouse models of human diseases, will complement the ongoing work of several research groups that are developing ESTs of the human genome.

Waterston's team, with support from Merck & Co. Inc., already has made more than 25,000 human ESTs freely available to scientists. A team led by Craig Venter of The Institute for Genomic Research in Rockville, Md., also has sequenced a large number of human ESTs, which are being made available on an individual basis to scientists under the terms of a database-access agreement.

A committee chaired by Shirley Tilghman, Ph.D., an HHMI investigator at Princeton University and an authority on the mouse genome, will provide advice and oversight to Waterston's research team.



Sophomore Randy Leventhal, left, and senior Alecia Riewerts help the Jewish Community Center of Washington, D.C., refurbish an inner-city church.

Students visit Holocaust museum

Thirty Washington University undergraduate students traveled to Washington, D.C., last month to visit the U.S. Holocaust Memorial Museum.

The three-day trip, titled "A Journey to Remember," began Jan. 25. Students of the St. Louis Hillel Center and the Jewish Student Council planned the trip. The students will draw on their experiences to plan a campuswide program for Holocaust Memorial Day in April.

While in Washington, D.C., the students also helped the Jewish Community Center refurbish an inner-city church; dined with students from the Hillel Jewish Student Center at George Washington University; and saw the play "Coming of the Hurricane" at the Arena Stage, a famous Washington theater, as part of the city's pre-Black History Month activities.

James E. McLeod, vice chancellor for students and dean of the College of Arts and Sciences, and Karen Levin Coburn, associate dean of student affairs, were the students' guests on the trip.

Matthew Lakenbach, a first-year student from West Hartford, Conn., said the museum trip provided students with a great opportunity to learn more about the Holocaust. The four-floor museum features interactive displays and videos, a children's learning center and a library. "The displays, ranging from those on

the Jewish Resistance to Nazi propaganda, are very complete. The whole museum had an impact on me," said Lakenbach, whose paternal grandparents fled their native Austria for Italy and eventually settled in the United States during World War II.

"In one case, they had a video listing the laws that restricted Jews from the mid-1930s to the mid-1940s. Marriage between Jews and non-Jews was forbidden, and items like scissors and knives were removed from the Jews' homes for fear they would retaliate," said Lakenbach. "The laws became more and more severe as World War II progressed. As a Jew, I thought, 'These laws would have applied to me.' It was really shocking."

When visitors first enter the museum, they each are given an identification card with a picture of a Holocaust victim. They go through the exhibits while reading related information about the victims. In some rooms, victims' voices are heard on audio tapes. Before leaving the museum, visitors learn whether the victims on their identification cards were killed or taken to the concentration camps or escaped.

February is Jewish Awareness Month, and numerous campus events are planned, including a course on Jewish cooking, a day of community service, jewelry making and a party featuring old and new Hebrew songs. For more information, call 726-6177.

— Carolyn Sanford

Campus Watch

The following incidents were reported to the University Police Department Jan. 29-Feb. 4. Readers with information that could assist the investigation of these incidents are urged to call 935-5555. This release is provided as a public service to promote safety awareness on campus.

Jan. 29

7:38 a.m. — A staff member reported that a radio/compact disc player, two stuffed animals and three boxes of Cracker Jack — valued at a total of \$133 — were stolen from Brown Hall.

12:38 p.m. — A student reported that a passenger-side mirror, valued at \$200, was stolen from a vehicle parked near the Millbrook Square apartments.

5:12 p.m. — A student reported being struck in the face by another student during a gathering at a fraternity house. No injuries were sustained. The incident is being referred to the judicial administrator.

9:42 p.m. — A student reported that a wallet, \$50 in cash, two credit cards and 17 compact discs — valued at a total of \$230 — were stolen from a Millbrook Square apartment.

Jan. 30

2:39 p.m. — A student reported that four gold rings, valued at more than \$500, and \$60 in cash were stolen from a Millbrook Square apartment.

Feb. 1

8:12 p.m. — A student reported that a wallet, \$5 in cash, credit cards, a checkbook and a

diabetes monitor — valued at a total of \$90 — were stolen from the Athletic Complex.

Feb. 2

8:25 a.m. — A Marriott Management Service employee reported that two 10-gallon water containers and a sign — valued at a total of \$300 — were stolen from Mallinckrodt Center.

Feb. 3

12:05 p.m. — \$400 in currency was reported stolen from a change machine in North Brookings Hall.

6:42 p.m. — A staff member reported that a "smart" card machine in Brown Hall had been damaged. The amount of money stolen from the machine is unknown, but the machine sustained more than \$500 in damage.

Feb. 4

3 p.m. — University Police and the Clayton Fire Department responded to a fire in the Bear's Den in Wohl Student Center. The fire apparently started in a deep-fryer and caused extensive damage to the facility.

University Police also responded to a false fire alarm in Millbrook Square apartments and to vandalism in Umrathskeller and Wohl Student Center.

For The Record

For The Record contains news about a wide variety of faculty, staff and student scholarly and professional activities.

Of note

Jay F. Piccirillo, M.D., assistant professor of otolaryngology, of medicine and of occupational therapy, received a \$15,000 one-year grant from the Deafness Research Foundation for a project titled "Measurement and Prediction of Hearing Aid Benefit." ...

Deborah K. White, chief technologist in the pulmonary laboratory in the Department of Pediatrics, received the Practitioner of the Year Award from the American Association for Respiratory Care's diagnostics specialty section.

Speaking of

Julia Biedenstein, a coordinating teacher at the Central Institute for the Deaf (CID), and **Lisa S. Davidson**, a lecturer in audiology in the Department of Speech and Hearing and school audiologist at CID, presented a seminar titled "Cochlear Implants in Children: Rehabilitation Techniques" in Albuquerque, N.M. ...

During the National Council on Family Relations' annual conference in Portland, Ore., **Letha Chadiha**, Ph.D., assistant professor of social work, presented a joint paper titled "Religiosity and Church-based Assistance Among Chronically Ill African-American and White Elderly." The conference was titled "Families: Honoring Our Past, Creating Our Future." She wrote the paper with **Osei Darkwa**, Ph.D., an alumnus of the George Warren Brown School of Social Work who is an assistant professor of social work at the University of Illinois in Chicago; **Peter Dore**, database administrator for the school's Center for Mental Health Services Research; **Nancy Morrow-Howell**, Ph.D., associate professor of social work; and **Enola K. Proctor**, Ph.D., Frank J. Bruno Professor of Social Work Research and director of the center. ...

Patricia Cobey, playwright-in-residence in performing arts and in English in Arts and Sciences, presented readings and workshops at the North East Institute of Higher Education in Northern Ireland. ...

Valerie Frigo, an educational consultant at the Central Institute for the Deaf (CID), and **Karen S. Stein**, assistant professor of education of the hearing impaired in the Department of Speech and Hearing and coordinator of outreach programs at CID, delivered a presentation titled "Responsible Inclusion: A Model for Assessment and Service" at the Alexander Graham Bell Association for the Deaf's conference in Montreal. The conference was titled "Choices and Challenges: A Conference on Responsible Inclusion." In addition, Stein and **Christine H. Gustus**, principal of CID and a lecturer in education of the hearing impaired in the department, presented a language instruction workshop at the Summit Speech School in Newark, N.J. ...

Ann E. Geers, Ph.D., associate professor of psychology in the Department of Speech and Hearing and director of clinical services at the Central Institute for the Deaf (CID), and **Jean S. Moog**, associate professor of education of the hearing impaired in the department and director of deaf education at CID, delivered the grand rounds at Northwestern University's medical school in Chicago. Moog also presented a workshop in Warren, Ohio, on the new Speech Perception Instructional Curriculum and Evaluation test kit published last summer by CID. ...

During the annual meeting of the Midwest Conference on Asian Affairs at the University of Missouri-St. Louis, **William C. Jones**, J.S.D., Charles F. Nagel Professor Emeritus of International and Comparative Law; **Charles R. McManis**, J.D., professor of law; and **Curtis J. Milhaupt**, J.D., associate professor of law, spoke during a panel discussion on "Emerging Legal Issues in East Asia." ...

Richard J. Mahoney, distinguished

executive-in-residence at the Center for the Study of American Business, helped conduct a symposium on preparing for career opportunities for the College of Arts and Sciences' graduate students and faculty at the University of Massachusetts in Amherst. In addition, he delivered a presentation on academic-corporate collaboration for the German-American Academic Council Foundation in Washington, D.C. ...

Mohamed-Salah Omri, a graduate student in comparative literature in Arts and Sciences, presented a paper on "Space and Collective Memory: The Case of Mahmud al-Mas'adi" at the Middle East Studies Association's 29th annual meeting in Washington, D.C.

On assignment

Jo Ann Scanlon, systems administrator in Accounting Services, Hilltop Campus, and **Byron N. Vermillion**, senior financial analyst in the Department of Budgeting and Financial Reporting, School of Medicine, were appointed to committees of the Central Association of College and University Business Officers. Scanlon was named to the St. Louis Professional Development Workshop Committee. Vermillion was appointed to the Audit Committee.

Making the news

Charles Osgood of the "CBS This Morning" news program quoted **Neil N. Bernstein**, LL.B., professor of law, in a story on the United Auto Workers/Caterpillar 17-month strike and contract vote. Bernstein also was interviewed on the topic by reporters from The New York Times, Los Angeles Times, Voice of America, Reuters, Associated Press, Chicago Sun-Times, St. Louis Post-Dispatch and Public Radio International's "Marketplace" program. ...

Joseph D. Ketner, director of the Gallery of Art, was featured in a full-page story in The New York Times on the painter Robert S. Duncanson, a freeborn "person of color" who became an internationally acclaimed artist in the mid-1800s. Ketner organized an exhibit titled "Lifting the Veil: Robert S. Duncanson and the Emergence of the African-American Artist" now being shown at the gallery. A shorter version of The New York Times story was published in the International Herald Tribune.

To press

Shirley K. Baker, vice chancellor for information technology and dean of University Libraries, edited a volume of essays titled "The Future of Resource Sharing" published by Haworth Press of New York and London. She edited the volume with Mary E. Jackson, access and delivery services consultant for the Association of Research Libraries. Baker also spoke on "Purchase Anxiety" at the American Library Association's meeting in San Antonio. The proceedings will be published and available on the World Wide Web. ...

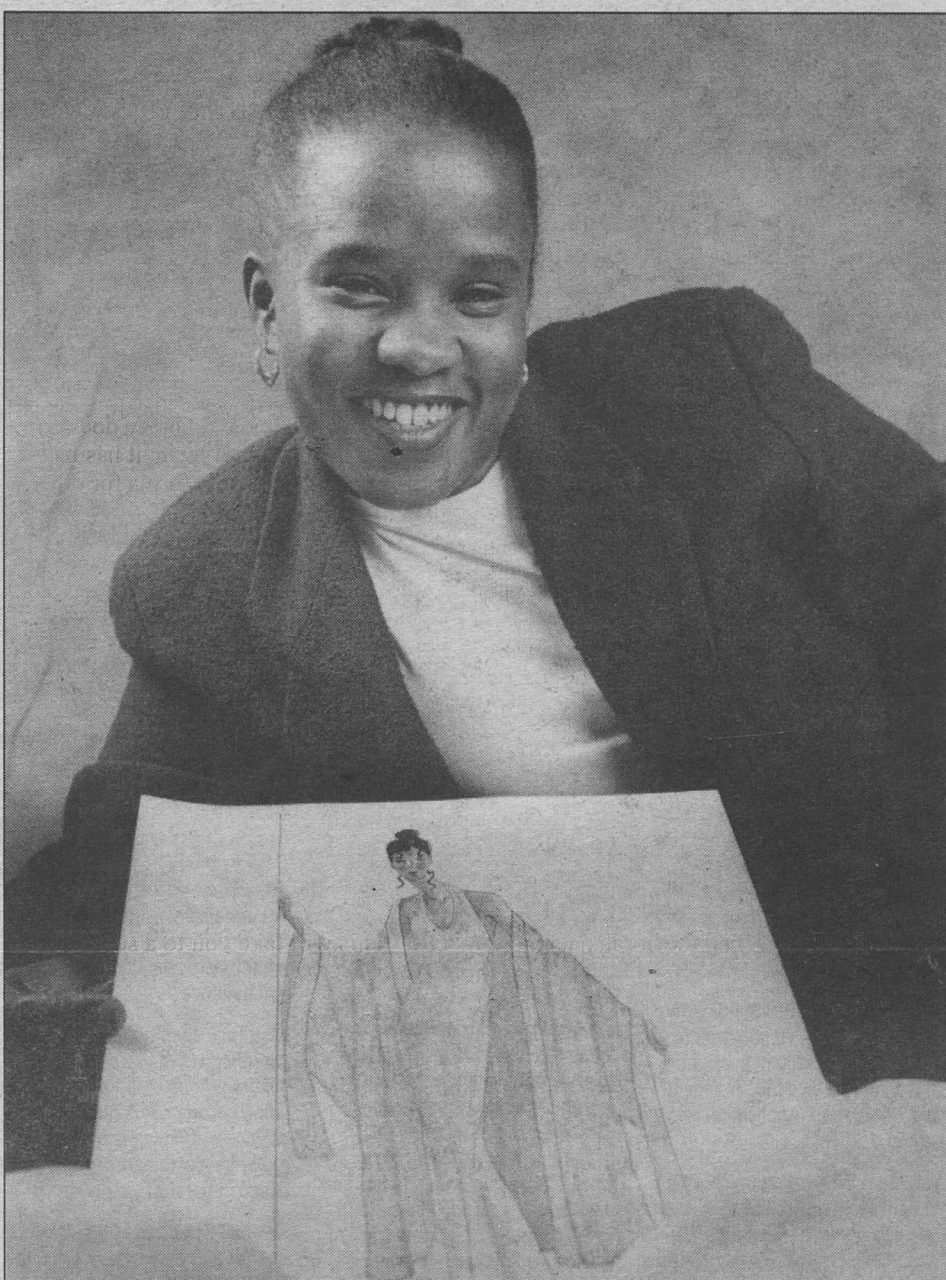
Eleni Bastéa, Ph.D., assistant professor of architecture, presented a paper titled "Regularization and Resistance: Urban Transformations in Late 19th-century Greece" at the conference on "Greek Society, Politics and Culture in the Era of King George I, 1863-1913" at King's College in London. The paper is scheduled to be published in Volume 4 of

Variorum, a series of publications produced by the Centre for Hellenic Studies in London. ...

Robert Pollak, Ph.D., Hearnreich Distinguished Professor of Economics in Arts and Sciences and in the John M. Olin School of Business, co-edited a book titled "From Parent to Child: Intra-household Allocations and Intergenerational Relations in the United States" published by the University of Chicago Press.

Guidelines for submitting copy:

Send your full name, complete title, department, phone number, and highest-earned degree, along with a typed description of your noteworthy activity, to For The Record, c/o Carolyn Sanford, Campus Box 1070, or p72245cs@wuvmd.wustl.edu. Items must not exceed 75 words. For more information, call Sanford at 935-5293.



Senior Anastasia White shows off her winning lingerie design.

Student named first runner-up in lingerie design competition

Senior Anastasia White is stitching together a future that looks as smooth as silk.

The 21-year-old fashion design major from New Orleans recently won first runner-up in a lingerie design competition sponsored by Caress Body Products and VH1 Music First. Her winning design was selected from more than 1,200 entries from across the country. White won \$500. The grand prize winner received \$1,000.

"They were looking for designs that portrayed their idea of a Caress woman ... soft and sensual," White said of the competition sponsored by the popular soap company. White's creation is a long,

sheer, ivory-colored lounging gown. It is backless with a halter neck. The gown flares out at the bottom and has a small train. A peach and ivory-colored kimono-type robe may be worn over the gown.

White and 15 other finalists in the competition sewed their creations. They then were displayed in a fashion show Jan. 18 at New York's Fashion Cafe, which White attended.

Before the competition, White had never expected to become a lingerie designer. With her recent success, she is reconsidering her future and now plans to build her portfolio around the sensual undergarments. "I'm going to go ahead and create a line of lingerie," said the John B. Ervin Scholar.

Introducing new faculty members

Medical Campus:

Steven Bassnett, Ph.D., assistant professor of ophthalmology and visual sciences, comes from the Uniformed Services University of the Health Sciences in Washington, D.C., where he was a research assistant professor of anatomy and cell biology for five years. His research interests include the role of cell membranes in the formation of cataracts and the delivery of gene therapy to the eye. He received a bachelor's degree in zoology and marine biology in 1982 from the University of Wales in Great Britain and a doctorate in biophysics in 1987 from the University of East Anglia, also in Great Britain.

Ken Yamaguchi, M.D., assistant professor of orthopaedic surgery and director of shoulder and elbow surgery, comes from the New York Orthopaedic Hospital, where he was a fellow of shoulder and elbow surgery. He also was an orthopaedic surgical resident and later chief resident at George Washington University Hospital in Washington, D.C. He received a bachelor's degree in biology in 1983 and a master's degree in microbiology in 1985, both from the University of California, Los Angeles. He received a medical degree in 1989 from the George Washington University School of Medicine.

Obituaries

Louis Aitken, assistant professor of medicine

Louis F. Aitken, M.D., clinical assistant professor emeritus of medicine, died of infirmities on Thursday, Jan. 25, 1996, at his home in Ladue. He was 93. Aitken, who retired in 1988, joined the School of Medicine in 1930 as a clinical instructor of medicine. He received a medical degree from the school in 1927.

Opportunities & personnel news

Hilltop Campus

The following is a partial list of positions available on the Hilltop Campus. Information regarding these and other positions may be obtained in the Office of Human Resources, Room 126 North Brookings Hall, or by calling 935-5990.

Assistant Registrar 960147. College of Arts and Sciences. Requirements: high school graduate, some college; strong organizational skills; ability to maintain confidentiality and work on teams. Application required.

Administrative Assistant 960150. Department of Education. Temporary (one-year) assignment. Requirement: certificate or associate's degree. Application required.

Administrative Assistant to Associate Dean and Director of External Affairs 960153. School of Law. Requirements: high school graduate, some college preferred; experience with Windows-based word processing, mail merges and e-mail; Aldus Pagemaker, graphics presentation and WordPerfect software experience preferred; good spelling, grammar and punctuation skills; good filing, organizational and coordinating skills; ability to handle multiple priorities and communicate well with others, including administrators, faculty and other departments. Application required.

Senior Project Engineer 960154. Electric Power Research Institute Accounting. Requirements: bachelor's degree; five years in management of water/wastewater treatment; experience in research. Application required.

Production Editor 960156. Office of Public Affairs. Requirements: high school graduate; proficiency in Quark Xpress, Aldus Freehand and Photoshop. Application required.

Assistant Director, John M. Olin School of Business 960158. Alumni and Development Programs. Requirements: bachelor's degree; three years development or related experience; familiarity with the general corporate community; excellent verbal and written communication skills; excellent program and event-management skills; ability to effectively use computer technology; ability to work effectively with diverse constituents; interest in meeting new people; ability to think strategically; ability to plan and implement effective development programs. This is a part-time position. Application required.

Software Specialist 960159. The Software Library. Requirements: bachelor's degree, college degree/business background preferred; experience in customer relations and/or in service organizations; ability to use office-automation and Internet tools; ability to manage technical information and provide services in a multiplatform and multivendor computing environment; excellent interpersonal, communication and organizational skills; detail-oriented. Application required.

Senior Project Leader 960160. Computing and Communications. Requirements: high school graduate, some college; five years data-processing experience; proven ability to design, program and install major data-processing systems; proven ability to design, write and install mantis and Cobol; experience with Lotus notes; IBM mainframe and PC experience desirable. Application required.

Administrative Assistant 960161. Career Center. Requirements: high school graduate, some college; specialized secretarial and business training; knowledge of FIS; knowledge of University policies and procedures; ability to work under gen-

eral supervision with responsibility for checking all work for accuracy and content; ability to grasp instructions, to meet changing conditions and to solve novel or problem situations; conscientious about neatness and order; excellent bookkeeping skills; shorthand optional. Application required.

Systems Programmer II 960164. Computing and Communications. Requirements: bachelor's degree; two years experience in data processing. Application required.

Senior News Editor 960168. Office of Public Affairs. Requirements: bachelor's degree, journalism or communications degree preferred; three to five years professional journalism experience preferred. Application required.

Administrative Assistant 960169. Alumni and Development Programs. Requirements: college degree or equivalent; specialized secretarial, business and event-planning training and/or experience; strong attention to detail; ability to work with multiple deadline priorities and individuals at all levels in a consistent and decisive manner; good command of grammar, punctuation and telephone skills, as well as Macintosh software and systems; willingness to work evenings and weekends on occasion with minimal supervision; ability to handle confidential information regarding staffing and volunteers in a loyal and responsible manner; maturity; well-groomed; pleasant personality. Application required.

Accounts Payable Service Representative 960171. Accounting Services. Requirements: high school graduate, some college; three semester hours of accounting or two years experience in accounting; college courses in business accounting preferred; working knowledge of routine office equipment, including PCs, calculators and typewriters; strong communication, organizational, verbal and alpha-numeric skills; use of discretionary judgment; word processing, spreadsheet and database experience highly desired; service-oriented; ability to participate as a team member on various projects to achieve the goals of Accounting Services. Application required.

Accounting Service Representative 960172. Accounting Services. Requirements: bachelor's degree; experience working with PCs; proficiency in WordPerfect, Focus, FIS and Lotus; ability to work independently, solve problems and participate on teams; strong analytical skills; excellent interpersonal skills; service-oriented communicator who is accessible and a team player with the ability to forge relationships and bring groups together on difficult accounting issues. Application required.

Payroll Services Representative 960173. Accounting Services. Requirements: high school graduate or equivalent; two years experience in bookkeeping, payroll, accounting or business; some college preferred; college course in business accounting preferred; working knowledge of routine office equipment, including PCs, calculators and typewriters; strong communication, organizational, verbal and alpha-numeric skills; use of discretionary judgment; word processing, spreadsheet and database experience highly desired; service-oriented; ability to participate as a team member on various projects to achieve the goals of Accounting Services. Application required.

Technical Sales Specialist 960174. Campus Stores. Requirements: high school graduate, some college preferred; knowledge of PCs and popular software; experience using a variety of microcomputer peripherals, such as modems and printers; physically

able to lift system components; able to work evenings and Saturdays. Résumé required.

Guest Relations Assistant 960175. Undergraduate Admission. Requirements: high school graduate, some college; outgoing personality and pleasant demeanor; professional appearance and ability to work well under pressure; excellent customer-service skills and the ability to greet the public; ability to perform as a member of a team of 40-plus professionals in a busy office environment; flexibility; sense of humor. Application required.

Medical Campus

The following is a partial list of positions available at the School of Medicine. Employees who are interested in submitting a transfer request should contact the Human Resources Department of the medical school at 362-7197 to request an application. External candidates may call 362-7195 for information regarding application procedures or may submit a résumé to the human resources office located at 4480 Clayton Ave., Campus Box 8002, St. Louis, MO, 63110. Please note that the medical school does not disclose salary information for vacancies, and the office strongly discourages inquiries to departments other than human resources.

Research Associate 960517-R. Gastroenterology. Requirement: master's degree, Ph.D. preferred. Responsibilities include studying vitamin A binding proteins, purifying proteins and assisting with lab maintenance.

Histology Technician 960529-R. Neurology. Requirements: high school graduate or equivalent, some college course work in the sciences; ability to learn sectioning of tissue and embedding of tissue in paraffin.

Medical Assistant I 960541-R. Obstetrics and Gynecology. Requirements: high school graduate or equivalent and medical assistant school; two years experience in a medical office setting preferred; working knowledge of anatomy, physiology, medical terminology and medical assistant techniques; interpersonal and organizational skills; ability to effectively communicate with patients, physicians and other staff members.

Clinical Lab Technician 960555-R. Obstetrics and Gynecology. Requirements: bachelor's degree or equivalent in biology or related sciences; some tissue culture experience preferred; working knowledge of chromosome identification, in situ hybridization and basic cytogenetic techniques; effective communication skills.

Research Patient Assistant 960564-R. General Internal Medicine. Requirement: bachelor's degree, master's degree preferred. Responsibilities: literature review; data entry; data analysis; manuscript and grant preparation; interview patients; provide secretarial assistance; participate in clinical anticoagulation research and pharmacodynamics and pharmacokinetics of warfarin or Heparin (monitoring blood glucose of warfarin therapy using fingerstick system); elementary biostatistics and cost-effectiveness analysis. (Students enrolled in clinical programs are encouraged to apply if they have no research experience.)

Staff Pharmacist 960573-R. Internal Medicine, Barnard Cancer Center. Requirements: registered pharmacist with a high standard of accuracy; experience with oncology patients preferred; I.V. therapy or chemotherapy experience.

Coordinator, Clinical Office 960589-R. Obstetrics and Gynecology. Requirements: associate's degree in business or related field with three years experience in an office setting; knowledge of accounting, finance and marketing practices; effective communication and organization skills; ability to use discretionary judgment. Schedule: part-time position, 24 hours per week at Missouri Baptist Hospital.

Assistant, Patient Services 960593-R. Obstetrics and Gynecology. Requirements: high school graduate with two years related experience; ability to handle multiple tasks; effective communication, organization and interpersonal skills; working knowledge of computers and filing systems. Position located at Missouri Baptist Hospital.

Clerk II (scheduling, reception) 960594-R. Obstetrics and Gynecology. Requirements: high school

graduate; one year secretarial experience preferred; working knowledge of computers, telephones and general office equipment; effective communication and interpersonal skills needed for clinical office setting. Position located at Missouri Baptist Hospital.

Sonographer 960595-R. Internal Medicine, Cardiology. Requirements: significant training in cardiac ultrasound, cardiac anatomy and echocardiographic methods and techniques; three years continuous experience performing ultrasound procedures.

Library Assistant 960606-R. Library. Requirements: high school graduate or equivalent; ability to work with deadlines and deal with public-service encounters; customer service-oriented.

Medical Transcriptionist 960617-R. Neurology. Requirements: ex-

cellent spelling, grammatical and organizational skills; ability to handle multiple tasks simultaneously; detail-oriented; typing 70 wpm with accuracy.

Clerk I 960623-R. Internal Medicine, Dermatology Outpatient. Requirements: high school graduate or equivalent; proficiency in alphabetical filing procedures; ability to work with limited supervision; detail-oriented. Schedule: as-needed basis between 8 a.m.-5 p.m. Mondays-Fridays.

Clerk II 960624-R, 960625-R. Internal Medicine, Dermatology Outpatient. Requirements: high school graduate or equivalent; demonstrated clerical, organizational and communication skills; ability to handle multiple tasks. Schedule: as-needed basis between 8 a.m.-5 p.m. Mondays-Fridays.

Events celebrate past, preview future — from page 1

Adelaide G. Welge Professor of Computer Science, and Jonathan S. Turner, Ph.D., the Henry Edwin Sever Professor of Engineering and chair of the Department of Computer Science, are collaborating with several industrial sponsors in Project Zeus, an effort to create broadband networking technology and to apply it within the University. They have pioneered the design and development of the nation's first multiswitch Asynchronous Transfer Mode metropolitan-area network supporting multipoint communication that can transmit multiple data, full-rate video, CD-quality audio and high-resolution images. Applications should come in tele-medicine, distance learning, workplace and social teleconferencing, and computational imaging. The computer networking group in the school generally is considered to be in the top five nationally.

In November 1995, the engineering campus became the site for the national Center for Imaging Science, directed by Michael I. Miller, Ph.D., Newton R. and Sarah Louisa Glasgow Wilson Professor of Biomedical Engineering. The center is the first national center to be housed at the school, and it draws the collaborative efforts of the nation's top researchers in

computerized image representation and analysis. Researchers from Harvard University, the Massachusetts Institute of Technology and the University of Texas, Austin, are part of the center.

In addition, the University in 1993 broke new ground with the establishment of the University of Missouri-St. Louis/Washington University joint Undergraduate Engineering Program, an innovative and unique arrangement that serves the engineering education needs of nearly 200 St. Louis-area non-traditional students. In collaboration with the state school, Washington University provides faculty, classroom facilities and resources to place-bound students, most of whom work full time while pursuing their dreams of becoming engineers.

"We have a strong tradition of making innovative inroads in engineering, science and technology and service to society," Byrnes said. "Our goals are to educate future entrepreneurs and leaders and to serve society as a center for learning in engineering, science and technology. The anniversary events will honor the contributions of the engineering school community and preview our exciting future."

— Tony Fitzpatrick

Engineering School Facts and Figures

The Washington University School of Engineering and Applied Science has made countless contributions to society — in St. Louis and beyond — in its 125 years of formal existence. The following are some facts and figures that show the school's growth and vigor as it celebrates its anniversary:

- The school can trace its origins, in part, to an 1854 speech made by William Greenleaf Eliot, then president of the University's Corporation. In that speech, Eliot said: "There is one view of the Washington Institute which I desire to keep particularly prominent; its practical character and tendencies. I hope to see the time when that which we call the Practical and Scientific Departments, will stand in the foreground, to give character to all the rest. In some way or other, a Practical and Scientific direction must be given to all educational schemes of the present day. Harvard University is, at this time, gaining more credit and accomplishing greater good, by the Lawrence Scientific School than by any other agency. We need just such a school, here. Its effect would be to elevate mechanical, agricultural, and mercantile pursuits, into learned professions. It would annihilate that absurd distinction by which three pursuits, of Law, Medicine, and Theology, are called professions, and everything else, labor or trade. ..."

- The present-day school has more than 13,000 alumni representing 75 countries besides the United States.

Students today represent a broad cross-section of the United States and international countries. The Class of 1999 hails from 36 states and 14 countries. Alumni have made significant contributions in industries such as science, business, health care, manufacturing, the environment and entertainment.

- For this academic year, the school has enrolled 1,201 undergraduates and 789 graduate students. At Commencement, approximately one-fourth of all Washington University diplomas earned will be in engineering.

- The number of faculty this academic year is 233, with 80 full-time professors. Of the full-time faculty, 44 percent have been hired since 1987. Twenty-eight of the full-time professors have been elected fellows of their professional societies, and there are three members of the National Academy of Engineering or the National Academy of Sciences.

- The school offers 10 undergraduate majors, 10 professional master's degree programs and more than 70 designated master's and Doctor of Science programs.

- The school has six international-exchange programs for engineers. They involve collaborations with the Institut National des Sciences Appliquées in France; Universität Stuttgart in Germany; The Technion in Israel; Kungliga Tekniska Högskolan in Sweden; Eindhoven Universiteit in the Netherlands; and the Instituto Tecnológico y de Estudios Superiores in Mexico.