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Record

Dec. 8, 2000

Volume 25 No. 13



Washington University in St. Louis

Young Named first William G. Hamm Professor of Plastic Surgery

By DAVID LINZEE

Veroy Young, M.D., a reconstructive and cosmetic surgeon, has been named the first William G. Hamm Professor of Plastic Surgery at Washington University School of Medicine. The chair was established by a bequest from Hamm, an alumnus and noted plastic surgeon who died in 1998.

"We are honored and thankful that Dr. Hamm remembered us in his will," said Mark S. Wrighton, Ph.D., chancellor of Washington University. "His splendid career was a credit to the University, and in creating an endowed chair he presented us with an asset of lasting value."

Hamm, a 1925 graduate of the

School of Medicine, trained under Vilray P. Blair, M.D., professor of surgery and one of the founders of reconstructive plastic surgery. The two published a paper on the split thickness skin graft, which became a standard treatment for severe burns. Moving to Atlanta in the mid-1930s, Hamm became the first plastic and reconstructive surgeon in the Southeast.

During World War II, Hamm served as head of plastic surgery at St. Alban's Hospital in New York, where he treated wounded sailors and Marines. Returning to Atlanta after the war, he focused on adults with cancer of the face, mouth and jaws and children with congenital

deformities. He also was professor emeritus of clinical surgery at Emory University.

"He had a deep, abiding interest in the welfare of his patients and a great love for his work. This commitment to Washington University was an investment in the future of the profession to which he dedicated his life," said Maurice J. Jurkiewicz, M.D., a colleague for many years.

William A. Peck, M.D., executive vice chancellor for medical affairs and dean of the School of Medicine, said, "Dr. Hamm's generosity makes it possible for us to acknowledge and support an eminent faculty member. V. Leroy Young has already had a long and distin-

guished career at the School of Medicine. We're confident he will make many more contributions in plastic surgery, as a clinician, researcher and teacher."

Young, who joined the faculty in 1980, is a leading expert on breast reconstruction and augmentation. He studies the properties of various breast implants to learn how long they last and whether they have potentially harmful long-term effects. Other research areas include the health benefits of breast reduction and liposuction. In 1999, he was first author of a report on the safety and effectiveness of ultrasound-assisted liposuction.

Young serves as chief of surgery at Barnes-Jewish West

County Hospital. In addition to breast surgery and liposuction, his specialties include cosmetic and reconstructive facial surgery and skin cancer treatment. He serves on the American Society of Plastic Surgeons board of directors and is committee chair for the Silicone Implant Research Committee of the Plastic Surgery Education Foundation. He also is an examiner for the American Board of Plastic Surgery.

He earned his bachelor's degree in 1966 and his medical degree in 1970 from the University of Kentucky at Lexington. After serving in the U.S. Army, he completed two residencies in general surgery and in plastic surgery at the University of Kentuck from 1977-79.

Supplier Diversity Initiative reports campus progress

By JESSICA N. ROBERTS

Washington University's efforts to increase the participation of minority- and women-owned firms in University construction projects continue, according to a recently released report.

In fiscal year 2000, 25.3 percent of contract dollars paid out on capital projects was paid to minority- and women-owned firms — 9.6 percent to minority-owned firms and 15.7 percent to women-owned firms. This reflects a slight increase over the 25 percent reported during fiscal year 1999.

"I think Washington University has been successful in increasing minority- and women-owned firms' participation in construction projects throughout campus," said Sandra Marks, director of supplier diversity programs since 1998. "The biggest success we've seen in fiscal year 2000 is that minority- and women-owned firms are not only gaining subcontractor dollars as they did in fiscal year 1999, they are becoming the firms that are holding the main contracts for a project."

As a part of the construction supplier diversity initiative, Marks continued the "Business of Construction" course, which was taught at the John M. Olin School of Business from Oct. 1999 through Feb. 2000. Twenty-one people completed the course taught by University professors and leaders of St. Louis' Associated General Contractors. The course is designed to help local contractors compete in the construction industry.

Marks also introduced the Minority Youth in Construction Summer Program, in which 33 African-American students entering ninth grade participated during June and July 2000. The students participated in a wide range of activities including math enrichment courses and field trips to local construction sites.

Minority and female work

See Initiative, page 6



Inspiring alumnus Actor/director and Washington University alumnus Harold Ramis, who is also a member of the Board of Trustees, met with film and media students from the Performing Arts Department in Arts & Sciences last week. Ramis was on campus to speak about his work in a talk at Graham Chapel and to host a screening for students of his latest film, the comedy "Bedazzled."

William Patient named to Board of Trustees

By M. FREDRIC VOLKMAN

The Board of Trustees of Washington University elected William F. Patient as an Ethan A. H. Shepley Trustee. Patient served as the first chief executive officer of The Geon Company from 1993-99. The announcement was made by Chancellor Mark S. Wrighton following a regular meeting of the Trustees on the University campus.

"William Patient is an excellent addition to the Washington University Board of Trustees, succeeding James V. O'Donnell, president of Bush-O'Donnell & Company, Inc., as a Shepley Trustee. We have been fortunate to

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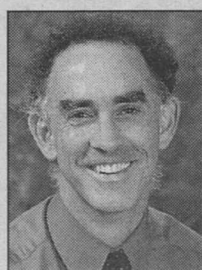


Patient: New Shepley trustee

Wallace named first Barbara Murphy Bryant professor of Art History

William E. Wallace, professor and chair of the Department of Art History & Archaeology in Arts & Sciences, has been named the first Barbara Murphy Bryant Distinguished Professor of Art

History, according to Chancellor Mark S. Wrighton. A formal installation took place on Dec. 4 in Holmes Lounge.



Wallace: Accomplished art historian

The Barbara Murphy Bryant Distinguished Professorship in Art History was established last February by Donald L. Bryant Jr. The professorship is named in honor of his wife,

Barbara Murphy Bryant, who earned a degree in art history from Washington University. Both Donald and Barbara are long-time benefactors of the art community and are active alumni.

"Barbara and Donald Bryant are generous members of the Washington University community and important patrons of the

art world," Wrighton said. "This endowed professorship is an expression of honor to the contributions of his wife to both communities. We are extremely grateful to the Bryants' for their wonderful support."

Barbara Bryant served as a member of the Friend's Board of The Saint Louis Art Museum from 1989-94. She also served on

benefit committees for the art museum, Laumeier Sculpture Park and Grand Center.

Donald Bryant has served on the School of Law National Council and as both Membership Chair and Patron Division Chair for the William Greenleaf Eliot Society. In October 1991, he was recognized for his contributions to

See Wallace, page 2

International and Area Studies program to start in 2002

By NEIL SCHOENHERR

International travel, global exchange, communications and technology play a large role in today's fast-paced business world. In the future, leaders will need to be trained in the issues of diversity and a global economy.

The Program of International

Studies in Arts & Sciences is planning a new academic option aimed at helping students meet the challenges of our rapidly changing world.

The new program, called International and Area Studies, could start as early as the fall of 2002.

"We are hoping to strengthen

our International Studies program here at Washington University," said Edward Macias, executive vice chancellor and dean of Arts & Sciences. "We plan to focus initially on undergraduate programs. This new program will have an international core of classes with a series of area studies

See Program, page 6



Congratulations! Unlike other fall graduates, Brandon Christensen, who earned a degree from the School of Social Work, chose the traditional graduation attire of cap and gown for the commencement ceremony held on Dec. 3 in Holmes Lounge. Chancellor Mark S. Wrighton congratulates Christensen as his wife, Sandra looks on.

School of Law announces spring lecture series

By ANN NICHOLSON

U.S. Supreme Court Justice Ruth Bader Ginsburg and Amartya Sen, 1998 Nobel laureate in Economic Sciences, are among the headliners in the School of Law's spring line-up for its third annual Public Interest Law Speakers Series, "Access to Justice: The Social Responsibility of Lawyers."

The lectures, which are held in Anheuser-Busch Hall, will kick off at 3 p.m. Wednesday, Jan. 17 with Yale University law professor Harlon Dalton delivering the Martin Luther King Jr. Commemorative Address on "Racial Healing." The lecture is co-sponsored by the Black Law Students Association. Author of the book,

"Racial Healing: Confronting the Fear between Blacks and Whites," Dalton is on the board of directors for the American Civil Liberties Union and was a member of the National Commission on AIDS.

The series will continue with lectures at:

- 11 a.m. Wednesday, Feb. 21 — Thomas P. Sullivan, co-chair of the Illinois Governor's Commission on Capital Punishment, on "The Death Penalty Process: Is It Fixable?" A practicing attorney with 46 years of civil and criminal litigation experience, Sullivan formerly was a U.S. attorney for the Northern District of Illinois.

- 2 p.m. Saturday, March 31 — Sen, master of Trinity College at Cambridge University and professor of economics at

Harvard University, on "Norms, Law and Poverty." Sen is considered the leading scholar on the causes and consequences of poverty. His lecture is in conjunction with the law school's Center for Interdisciplinary Studies' March 30-31 conference on "Norms and the Law."

- 11 a.m., Wednesday, April 4 — Justice Ginsburg on "A Conversation with Justice Ginsburg." She is a founder of the Women's Rights Project of the American Civil Liberties Union, a member of the Council on Foreign Relations and a fellow of the American Academy of Arts and Sciences. Ginsburg is serving as a jurist-in-residence at the law school.

For more information, call 935-4958.

Wallace

Arts & Sciences names first Bryant Professor

— from page 1

the University with a Distinguished Alumni Award at Founders Day.

After graduating from Denison University in 1964, he earned a law degree from Washington University School of Law in 1967, and an M.S.F.S. from American College in 1978. He is chairman and chief executive officer of the St. Louis-based Bryant Group Inc., which specializes in executive fringe benefit planning for public and privately held businesses. His wide-ranging interests include involvement in numerous cultural and civic organizations in St. Louis, including the Arts and Education Council, Dance St. Louis, Opera Theatre, the St. Louis Arts Festival and the United Way. He has served as a commissioner for The Saint Louis Art Museum and is a member of its Board of Trustees. In addition, he is one of the most significant collectors of contemporary art in America.

"We are delighted to name Bill Wallace as recipient of the first Barbara Murphy Bryant Distinguished Professor in Art History," stated Edward S. Macias, executive vice chancellor and dean of Arts & Sciences. "Bill is a remarkable teacher and

scholar whose discoveries about Michelangelo have contributed significantly to our understanding of the great artist and his times."

A scholar of Renaissance art and architecture, Wallace is an internationally recognized authority on Michelangelo and his contemporaries. He is the author and editor of four books on Michelangelo, including, "Michelangelo at San Lorenzo: the Genius as Entrepreneur" (1994); "Michelangelo: Selected Scholarship in English" (1996) and "Michelangelo: The Complete Sculpture, Painting, and Architecture" (1998), which was awarded the 1999 Umhoefer Prize for Achievement in Humanities. He has published more than 40 articles, two works of fiction and is currently writing a biography of Michelangelo.

Wallace earned a bachelor's degree in 1974 from Dickinson College in Carlisle, Pa.; a master's degree in 1976 from the University of Illinois in Urbana-Champaign; and a doctorate in 1983 from Columbia University, all in art history. He joined the faculty of Arts & Sciences as assistant professor in 1983, was promoted to associate professor with tenure in 1990 and to full professor in 1999. In July 1999 he was named to his present position.

Wallace was the Robert Sterling Clark Distinguished Visiting Professor at Williams College in Williamstown, Ma., in spring 1999. He was a visiting fellow at the American Academy in Rome in 1996-97, and a fellow at Villa I

Tatti, Harvard University's Center for Renaissance Studies in Florence, Italy in 1990-91. He serves on the editorial boards of The Sixteenth Century Journal and Explorations in Renaissance Culture and is a manuscript referee for several university presses and other journals. He has received numerous grants and awards, including four from the National Endowment for the Humanities and five University faculty research grants.

Wallace's recent courses include "Introduction to Western Art," "High Renaissance Art," "Michelangelo" and "Art of the Early Italian Renaissance." He consistently earns the highest accolades from his graduate and undergraduate students, who praise his extraordinary ability to connect with students in his large art history survey courses — his lectures prompt students to scramble for front-row seats in Steinberg Hall auditorium. Wallace received the 1995 Governor's Award for Excellence in Teaching from the Coordinating Board for Higher Education, a state policy board that oversees the Missouri Department of Higher Education. He is presently serving a three-year term as an elected member of the Arts & Sciences Curriculum Committee and sits on the executive committees of the Visual Arts and Design Center and the Medieval-Renaissance Studies Program.

University-connected scientists find key gene in fruit flies

By TONY FITZPATRICK

Telling the boys from the girls in the animal kingdom is usually pretty apparent. Striking colors and other showy displays in birds, fish and insects are meant to advertise sexual availability and robustness so that males fighting Father Time are able to quickly and successfully attract female mates. Such differences are called sexual dimorphisms.

Now, a researcher at Washington University and colleagues at the University of Wisconsin-Madison, all with a connection to the University, have found and characterized a gene that governs a striking sexual dimorphism in the fruit fly.

The discovery, described in the Nov. 30 edition of the British scientific journal *Nature*, shows how and why animals go to such narcissistic lengths, but also provides insight into the genetic changes that eventually lead to the evolution of new animal species.

"Fundamentally, the difference between species is in their DNA," says Sean B. Carroll, a professor of genetics at the Howard Hughes Medical Institute at the University of Wisconsin-Madison and an author of the *Nature* paper. He said the discovered gene makes a key difference between fly species.

Carroll is an alumnus of the University, as is co-author Artyom Kopp, Ph.D., a post-doctoral researcher at the University of Wisconsin-Madison, and former student of co-author Ian Duncan, Ph.D., professor of biology in Arts & Sciences.

Kopp made important discoveries on *Drosophila* pigmentation working with Duncan at the University in the late 1990s. Carroll did undergraduate research in the biology department's evolution program and worked closely with Owen Sexton, Ph.D., professor emeritus of biology in Arts & Sciences, on snakes.

In the fruit fly, specifically *Drosophila melanogaster*, one of the obvious visual signals of its sex is body pigmentation: the rear end of the melanogaster male is heavily pigmented and the female's is not. This difference has evolved only recently in a relatively small subset of *Drosophila* species.

The researchers found that a gene called "bric-a-brac" establishes the difference between melanogaster females and males by suppressing pigmentation in females. However, the same gene functions in both sexes in other fly species where male-specific pigmentation is absent and males and females look similar.

Scientists have long believed that animals assume gaudy colors to promote themselves as potential mates, and that this "dressing up" is a major force in animal evolution. The researchers say the present role

of bric-a-brac was probably shaped by the sexual selection process because the pigmentation patterns specified by this gene affect mating preferences. But looking at the genetic controls for gender-based pigmentation in fruit flies the team found that, for the female, the sex appeal of a pattern or color wears off over time.

In experiments with male flies engineered to have the same abdominal stripes as the female melanogaster, the courted females were smitten no less than when confronted with a male flying all the colors of attraction. This suggests that the male is constantly under pressure to evolve something to be competitive in the "mating game."

Kopp likens this scenario to a "sexual arms race."

"What we found was that the female didn't care, and that makes sense under the arms race scenario," said Kopp. "The pigmentation has lost its significance to the female — it is last year's fashion — and males are probably forced to evolve new ones all the time."

Accumulated over time, it is these kinds of display changes that lead to morphological, or body evolution and the establishment of new species, Carroll said. The gender-based pigmentation patterns may still serve a useful

purpose by allowing males, who have a very short time to mate and pass their genes, to avoid mistakenly mating with males.

"Courtship, for a fruit fly, is a very expensive activity, and

males don't want to waste their time approaching other males," said Carroll. "They want to find Jill, not Jack."

But the fundamental importance of the new discovery, the biologists maintain, is that it provides a window to ongoing evolutionary processes.

"What is exciting about this is that male-specific pigmentation evolved quite recently," said Duncan. "Artyom did a beautiful job in Sean's lab of comparing bric-a-brac expression in closely related *Drosophila* species. Within the melanogaster species subgroup and the closely related oriental species subgroups, he finds a perfect correlation between male-specific bric-a-brac repression and male-specific pigmentation. This suggests that by comparing bric-a-brac regulatory regions in closely related species that do and do not have dimorphic pigmentation, it should be possible to identify the DNA sequence changes that were responsible for this evolutionary innovation."

"Looking at these flies, we could see that this is something that evolved very quickly, and that it continues to evolve," said Kopp. "Such rapid change give us a chance to observe evolution in progress, rather than just look at the end result."

Record

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Washington University in St. Louis

Medical School Update

Family members of prostate cancer patients are safe from radiation

There's good news for people whose prostate cancer is being treated with radioactive "seed" implants. School of Medicine researchers have determined that radiation exposure to family members is minimal. In fact, the exposure is far less than taking a round-trip flight to Tokyo or living in a major city such as Denver.

Research on the amount of radiation exposure spouses and other family members receive from the implants was presented Nov. 27 at the 86th Scientific Assembly and Annual Meeting of the Radiological Society of North America in Chicago.

"We now can tell a woman the amount of radiation she will get from her husband in one year is less than if she were living in Denver for three or four months," said Jeff M. Michalski, M.D., assistant professor of radiology. "It's reassuring for family members and patients who are

considering radioactive seed implants."

More than 180,000 men will be diagnosed with prostate cancer this year. According to the American Cancer Society, it is the second leading cause of cancer death in men. One in four of the 144,000 patients whose cancer has not spread beyond the prostate opt to be treated with radioactive seed implants, which is called brachytherapy.

Forty men participated in the study; 27 received iodine implants and 13 received palladium implants. These two most common seeds make up more than 99 percent of all prostate radiation implants. All the men wore badges at their waists and necks that measure radiation exposure in millirem (mrem). They wore badges 24 hours a day, seven days a week for three weeks, other than when they bathed. Spouses, children, other relatives who lived in the

home and some pets were given the badges to wear whenever they were with the men, including in bed. Additionally, badges were placed in each main room of the house, including the kitchen, bedroom, family room and bathroom.

Although the study lasted three weeks, results were extrapolated to determine exposure during a year. For the iodine group, spouses received an average of 14 mrem, other family members received less than 8 mrem and the rooms measured less than 5 mrem. For the palladium group, spouses received an average of 6 mrem. Other family members and rooms in the house in most cases received essentially 0 mrem.

Humans are continually exposed to radiation in the environment, whether from the sun, in an airplane or from materials such as earthenware.

"A person flying round-trip from New York to Tokyo will receive about 20 mrem," said Michalski. "Just from living in a big city for a year, a person would receive 50 to 85 mrem."

The Nuclear Regulatory Commission has determined the average person should avoid being exposed to more than 500 mrem a year from nonmedical or nonoccupational sources. The average person is exposed to between 200 and 400 mrem a year, but that number varies greatly depending on several factors, including where the person lives and his or her occupation, Michalski said. Medical radiation sources, such as the seeds, offer far more benefit than risk to the patient, he said.

Both iodine and palladium have relatively short half-lives of 60 days and 17 days, respectively. After a year, there's very little radioactivity left in

the implants, Michalski said.

Brachytherapy, or internal radiation therapy, involves internally planting an average of about 100 radioactive seeds, smaller than grains of rice, in and around the prostate. Each seed is made of a radioactive substance encased in a sealed metal tube. They are implanted in a minor surgical procedure, through needles rather than an open incision, and patients generally go home the same afternoon. Studies show about 78 percent of men treated with the seeds are cured after 10 years, a rate similar to surgical removal of the prostate. There is less risk of impotence and incontinence with the seeds than with the surgery. Brachytherapy is more convenient than traditional external beam radiation therapy for many patients, because they don't have to go to the hospital for treatments.

J. Taylor Harden to address minority involvement in medical research

By GILA RECKESS

J Taylor Harden, Ph.D., assistant to the director for special populations at the National Institute on Aging (NIA), will deliver a lecture at noon Jan. 16 in the East Pavilion Auditorium at the School of Medicine. He will present the NIA's perspective on the importance of including minority populations in health-related research. The Washington University community and the public are invited.

Harden earned her Ph.D. in nursing from the University of Texas at Austin. Since then, she has worked to forward research and clinical care for women, racial minority groups, disabled citizens and other special populations. She previously served as scientific program administrator at the National Institute of Nursing Research and has been a consultant to the Public Health Service Office of Minority Health, the National Institute of Drug Abuse and the Agency for Health Care Policy and Research. Among her leadership positions in a variety of professional and scientific organizations, Harden is a fellow in the American Academy of Nursing.

The talk is sponsored by the University's Alzheimer Disease Research Center (ADRC) and their newly-formed African American Advisory Board, which is part of an initiative to increase representation of minority populations in Alzheimer's research and clinical opportunities.

Alzheimer's disease affects an estimated 4 million people in the United States, with roughly 39,000 diagnosed cases

in the St. Louis area. Though experts believe the incidence rate is the same across all races, the vast majority of patients who participate in Alzheimer's research are Caucasian.

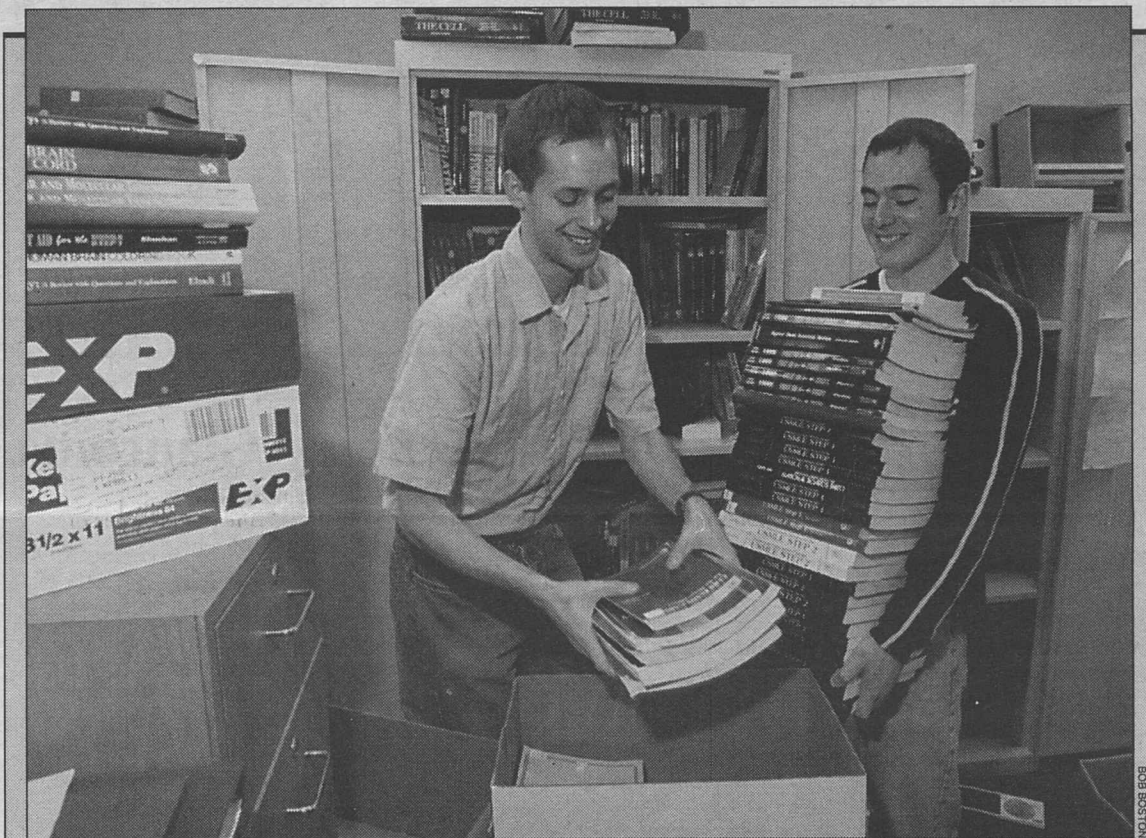
That's why the ADRC has revitalized efforts to reach out to minority populations in the St. Louis area, particularly to the African-American community, said Thomas M. Meuser, Ph.D., director of the education core at the ADRC and research assistant professor of neurology.

"It is important that advances in Alzheimer's disease come from studies that represent the entire older adult population," explained John C. Morris, M.D., co-director of the ADRC and the Friedman Professor of Neurology. "Similarly, benefits from research must be extended to all groups."

Of the 28 Alzheimer's disease centers funded by the NIA, the ADRC consistently has been in the top third in recruiting African-Americans for research participation. This achievement is largely due to the Memory & Aging Project Satellite program in the City of St. Louis, under the direction of Dorothy F. Edwards, Ph.D., associate professor of neurology and research assistant professor of occupational therapy.

However, retention of these participants has been more of a challenge. Current efforts focus on reducing barriers to long-term participation while also reaching out to more African-Americans.

"The NIA shares the ADRC's mission to reach out to minority groups that up to now have been underrepresented in clinical studies," Morris said. "We are delighted that Dr. Harden will join us in January to support efforts to accomplish this goal."



Gift giving Second-year medical student Jason Anast, left, and Sami Barmada, a third-year M.D./Ph.D. student, pack used textbooks to donate to a medical school in India. They are members of MedSTUBS, the Medical Student Used Book Store, which helps students sell and buy used textbooks. Students donate books that do not sell in two years.

Faculty receive \$5.6 million to study nerve cells

Four School of Medicine researchers have received a five-year \$5.6 million grant from the National Institute of Neurological Disorders and Stroke to examine how connections form in the brain.

The investigators are Joshua R. Sanes, Ph.D., the Alumni Endowed Professor of Anatomy and Neurobiology, Ann Marie Craig, Ph.D., associate professor of anatomy and neurobiology, Jeff W. Lichtman, M.D., Ph.D., professor of anatomy and neurobiology and of biomedical engineering, and Rachel O. L. Wong, Ph.D., assistant professor of anatomy and neurobiology.

Brain cells communicate with each other across small gaps called synapses. "Synapses are where all information processing occurs — both thoughts and emotions," Sanes explained. "Changes in synapses are the cellular basis of learning and memory." In addition, researchers believe many neurological and psychiatric disorders directly result from synapse malfunction.

When forming synapses, cells must make the right connections. However, scientists do not yet understand how this process occurs. The new grant continues a tradition of combining expertise and technology among labs at the medical school to pursue an answer to this critical question.

Sanes uses genetically altered mice to study molecules believed to be important in synapse formation. He focuses on junctions between nerve cells and muscle fibers. These connections, called neuromuscular junctions, are favored for synaptic research because they are easily accessible.

Lichtman also studies neuromuscular junctions. Rather than manipulating molecules in mouse models, he uses revolutionary imaging tools to watch synapses forming in mice. By collaborating, Lichtman and Sanes can geneti-

cally manipulate the expression of certain molecules and watch the effects of those manipulations in the long-term process of creating junctions between cells.

Neuromuscular junctions are only a model of synapses between neurons such as those found in the brain. Wong studies the formation of synapses that connect neurons in the retina. "By studying central synapses, Rachel can help us with our larger goal of exploring neuron-to-neuron synapse formation. And we can provide her with methods she otherwise would not have had access to," Sanes said.

The fourth component of this collaboration is Craig's cell-culture research. She examines molecules and neurons in a dish to provide yet another perspective into the complex process of synapse formation.

By combining these four separate approaches to the same question, the investigators hope to understand how connections form between these cells. The results could help the medical community intervene when synaptic formation goes awry. They also could help regenerative medicine ensure that newly transplanted cells can communicate with other cells.

Minimally invasive surgery center offers latest technology

This probably is the most advanced and best equipped center of its kind in the United States," said Nathaniel J. Soper, M.D., director of the Washington University Institute For Minimally Invasive Surgery, at a ribbon-cutting ceremony for the center Nov. 29.

More space and the latest robotic technology will allow School of Medicine surgeons to

speedily bring to patients the benefits of the new techniques: less pain and scarring, shorter recovery periods and reduced costs.

The institute is a place for education as well as surgical procedures. A nonsterile area, with six operating tables, is used for training residents and visiting surgeons. Video links to the Eric P. Newman Education Center make courses and demonstra-

tions for larger audiences possible. There also are two new sterile operating rooms for patients, both with state-of-the-art technology. Adjoining the institute is the lab of Ralph J. Damiano Jr., M.D., professor and chief of cardiac surgery. "We may be the only institution in the United States that offers cardiac in addition to general and urological minimally invasive surgery," said Soper, who also is a professor of surgery.

University Events



Birthday wish On Thursday, Nov. 16, the Brookings Residential College hosted a birthday party for the youngest member of their Faculty Family, MacKenzie Freeman, who turned two. The members of the Residential College used this event to raise money and provide new unwrapped toys for the St. Louis Crisis Nursery.

Campus groups to hold Gathering for World Peace

BY NEIL SCHOENHERR

Amidst the constant reports of conflict and strife throughout the world, a cry for peace will come from Washington University on Dec. 13 as leaders from several different campus groups gather in Graham Chapel at 11 a.m. to speak out for an end to violence.

The second annual Gathering for World Peace is free and open to the public. Religious leaders here hope it will have a positive effect on ending conflict around the world and in our own backyard.

"The people of the world are starting to recognize that our planet has too much violence," said Leslie Limbaugh, Baptist campus minister.

"In each of our own faith traditions we recognize that violence is unacceptable," she said. "If we can do something to bring about peace in our own neighborhoods, we must make it our top priority."

The gathering will feature a short speech on peace and light by Jill E. Carnaghi, assistant vice chancellor for student activities and director of campus life. Following that, representatives from different religious groups around campus will present sacred text readings on peace. Singing will follow the readings.

The groups that are scheduled

to attend include many Christian faiths, Judaism, Hinduism, Buddhism, Islam, Taoism, Confucianism, Native American and the campus pagans.

Limbaugh said the University Interfaith Campus Ministers Association came up with the idea for a millennium peace gathering last year. That event was "a very positive experience," according to Limbaugh, and the group decided to try it again this year.

Rabbi Hyim Shafner, of the University's St. Louis Hillel, said he thinks the peace gathering is a wonderful event. "It really fits the campus atmosphere of breaking down barriers and showing that we all have a common belief in peace," he said. He added that the campus ministers decided on the idea of a peace gathering to emphasize what the different religions can accomplish as a group and to show students that religious involvement is important.

John Kindschuh, an intern at the Catholic Student Center, agreed. "The gathering will provide a place where we can stress unity and cooperation among the faiths," he said.

Limbaugh added, "Taking time out to pray and focus on peace may be the best thing students can do during the stressful time of exams."

'Messiah' • Brain Volume • Glaucoma • 'Scouring the Lawn'

"University Events" lists a portion of the activities taking place at Washington University Dec. 8-20. Visit the Web for expanded calendars for the School of Medicine (medschool.wustl.edu/events/) and the Hilltop Campus (cf6000.wustl.edu/calendar/events/).

Exhibitions

"Advocates for Change: 75 Years of Journalism and Social Work." St. Louis Post-Dispatch editorial cartoon exhibit. George Warren Brown School of Social Work 75th anniversary event. Through Dec. 15. GWB Library, Brown Hall. 935-4780.

"Twenty-one Years of Books." Dec. 4-31. Ken Botnick, assoc. prof. of art. Sponsored by Olin Library Special Collections. Fifth floor Olin Library. 935-5495.

"Relationships." Through Jan. 1. SEEN, a group of young artists from WU's School of Art. Co-sponsored by the School of Art and Center of Technology Management. First Site gallery, Center of Technology Management, 724 S. Euclid Ave. 747-0920.

Film

Monday, Dec. 11

7 p.m. Chilean Film Series. "Chacotero Sentimental." Room 252 Olin Library. 935-5175.

Lectures

Friday, Dec. 8

9:15 a.m. Pediatric Grand Rounds. "Acute Respiratory Distress Syndrome: Importance of the Epithelium in Lung Injury and Repair." John K. McGuire, instructor of pediatrics, critical care div. Clopton Aud., 4950 Children's Place. 454-6006.

Noon. Cell biology and physiology seminar. "Flotillins and Insulin-related Glucose Transport in Adipocytes." Perry E. Bickel, asst. prof. of cell biology and physiology and of medicine. Room 426 McDonnell Medical Sciences Bldg. 362-6950.

Monday, Dec. 11

Noon-1 p.m. Molecular biology and pharmacology seminar. "Synapse Formation, Growth, and Plasticity: Genetic Analysis at the Drosophila Neuromuscular Junction." Aaron DiAntonio, asst. prof. of molecular biology and pharmacology. Room 3907 South Bldg. 362-2725.

4 p.m. Biology seminar. "Connecting the Endoskeleton and Exoskeleton of a Plant Cell (New Data and Hypotheses for How Cell Activities are Coordinated)." Barbara Pickard, prof. of biology. Room 322 Rebstock Hall. 935-6860.

4 p.m. Condensed matter/materials and biological physics seminar.

"Why 3/5 of the Brain Volume Is Wire." Charles Stevens, Salk Inst. of Biological Studies, La Jolla, Calif. Room 241

Compton Hall (coffee 3:45 p.m.). 935-6276.

4 p.m. Immunology Research Seminar Series. "Adapter Proteins As Regulators of T Cell and Platelet Function." Gary Koretzky, Abramson Family Cancer Research Inst., U. of Pennsylvania School of Medicine. Eric P. Newman Education Center. 362-2763.

Tuesday, Dec. 12

Noon. Molecular Microbiology and Microbial Pathogenesis Seminar Series. "Role of Nrmpp Proteins in Resistance to Infection, Macrophage Function, and Divalent Cation Transport." Philippe Gros, prof. of biochemistry, McGill U., Montreal, Quebec, Canada. Cori Aud., 4565 McKinley Ave. 362-7059.

12:10-12:55 p.m. Physical therapy research seminar. "Constraint Induced Movement: Are We Forced to Use It?" Alexander W. Dromerick, assoc. prof. of neurology and neurological surgery and of occupational therapy. Classroom

B110, 4444 Forest Park Blvd. 286-1404.

Wednesday, Dec. 13

3:45 p.m. Physics colloquium. "Imperfections and the New 'Materials' Physics." Ramki Kalyanaraman, post-doctoral research fellow, Oak Ridge National Lab and Lucent Technologies Bell Labs. Room 204 Crow Hall (coffee 3:30 p.m., Room 241 Compton Hall). 935-6276

Thursday, Dec. 14

11 a.m. Pulmonary and Critical Care Medicine Grand Rounds. "Immunity, Inflammation and Remodeling in the Airway Epithelial Barrier." Michael J. Holtzman, the Selma and Herman Seldin Prof. of Medicine, dir. of pulmonary and critical care medicine



and prof. of cell biology and physiology. East Pavilion Aud., Barnes-Jewish Hosp. Bldg. 362-6904.

Noon-1 p.m. Genetics seminar. "Linked Phylogenetic, Metabolic and Geochemical Diversity in the Hydrothermal Ecosystem of Vulcano Island, Southern Italy." Jan P. Amend, asst. prof. of earth and planetary sciences. Room 823 McDonnell Medical Sciences Bldg. 362-7072.

3 p.m. Physics theory seminar. "Nontopological Finite Temperature Induced Fermion Number." Gerald Dunne, U. of Conn. Room 241 Compton (coffee 2:45 p.m.). 935-6276.

Friday, Dec. 15

9:15 a.m. Pediatric Grand Rounds. "Glaucoma in Infants and Children." Michael A. Kass, prof. and chair. of ophthalmology and visual sciences. Clopton Aud., 4950 Children's Place. 454-6006.

Monday, Dec. 18

Noon. Lung biology conference. "Epithelial Cell Mechanisms for Clearance of Haemophilus Influenzae From the Airway." Dwight C. Look, asst. prof. of medicine. Room 801 Clinical Sciences Research Bldg. 362-8983.

Noon-1 p.m. Molecular biology and pharmacology seminar. "Regulation of Secondary Lymphoid Tissue Follicle Structure and Function by Lymphotoxin." David D. Chaplin, prof. of medicine, genetics and molecular microbiology. Room 3907 South Bldg. 362-2725.

4 p.m. Immunology Research Seminar Series. "In Vivo Functions of Natural Killer Cells." Wayne M. Yokoyama, the Sam J. Levin and Audrey Loew Levin Prof. of Research in Arthritis and prof. of pathology. Eric P. Newman Education Center. 362-2763.

Wednesday, Dec. 20

6:30 a.m. Orthopaedic surgery distinguished lecture. "Health Care in the Millennium." James Weinstein, prof. of orthopaedic surgery, dir. of Multidisciplinary Spine Center, Dartmouth-Hitchcock Medical Center, Lebanon, N.H. Scarpellino Aud., first floor, 510 S. Kingshighway Blvd. 747-2562.

Music

Friday, Dec. 8

8 p.m. WU Opera. Excerpts from Mozart's "The Magic Flute" and "The Abduction from the Seraglio." Jolly Stewart, dir. (also Dec. 9, same time). Umrath Hall Lounge. 935-4841.

Sunday, Dec. 10

3 p.m. Handel's "Messiah" sing-along. John Stewart, dir.; William Partridge, organist; Christine Johnson, soprano; Kendall Gladen, alto; James Harr, tenor; Robert Reed, baritone. Graham Chapel. 935-4841.

Tuesday, Dec. 12

8 p.m. WU Chorus concert. Eric Anthony, dir. Graham Chapel. 935-4841.

On Stage

Friday, Dec. 8

8 p.m. WU Dance Theatre. (Also Dec. 9,

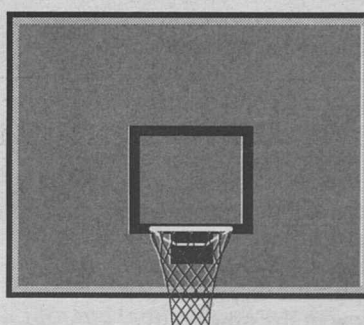
same time, and Dec. 10, 2 p.m.) Cost: \$12; \$8, WU faculty, staff and students.



Sports

Friday, Dec. 8

6 p.m. Women's Basketball vs. Johns Hopkins U. Athletic Complex. 935-5220.



8 p.m. Men's Basketball vs. Johns Hopkins U. Athletic Complex. 935-5220.

Saturday, Dec. 16

6 p.m. Women's Basketball vs. MacMurray College, Jacksonville, Ill. Athletic Complex. 935-5220.

8 p.m. Men's Basketball vs. MacMurray College, Jacksonville, Ill. Athletic Complex. 935-5220.

Worship

Friday, Dec. 8

11:15 a.m. Feast of the Immaculate Conception Mass. Catholic Student Center, 6352 Forsyth Blvd. 935-9191.

1:10 p.m. Muslim Friday prayers. Includes sermon and prayer service. Lambert Lounge, Mallinckrodt Student Center. 935-3543.

8 p.m. Advent celebration. "Find Us Ready?" Cost: \$5, \$3 for students. Graham Chapel. 935-9191.

Wednesday, Dec. 13

11 a.m. Interfaith prayer for peace. Sponsored by the Catholic Student Center. Graham Chapel. 935-9191.

Class reveals design secrets to all students

By LIAM OTTEN

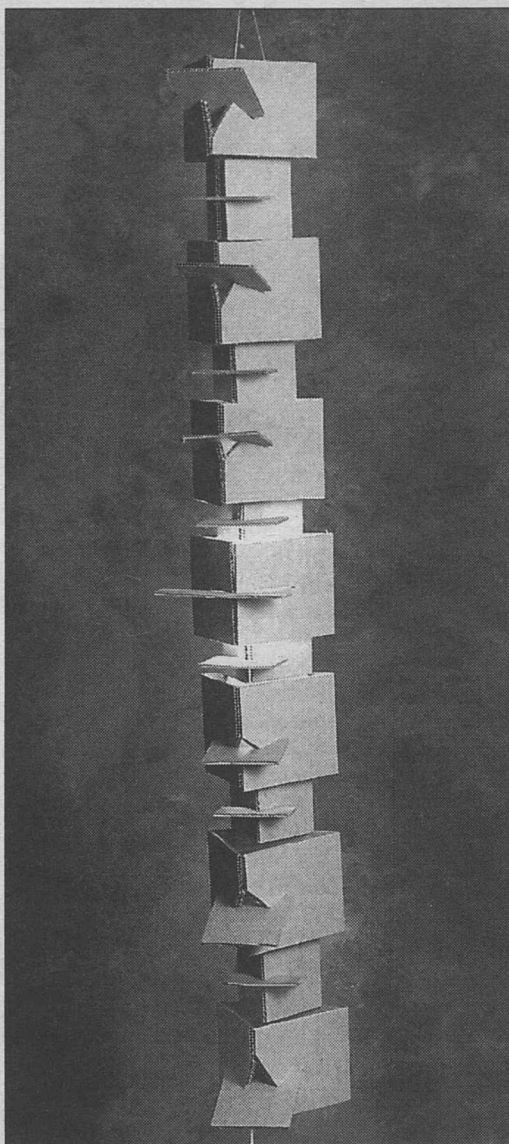
Creativity, despite some popular misconceptions, is in many ways a teachable skill, no different in that sense from math, music or volleyball. Sure, innate ability plays a role, but so do resilience, hard work and informed decision making. As most professionals can attest, real accomplishment takes far more than the occasional "Eureka!" moment.

This fall, an innovative course at the School of Architecture helped awaken students from around the University to previously untapped creative potential. Launched as a pilot program in 1998 "Architecture 209: The Design Process" was developed in collaboration with the Department of Civil Engineering and originally limited to civil engineering freshmen and sophomores. This semester, however, enrollment was opened to students of all years and now represents a diverse range of disciplines, from archaeology and environmental studies to mechanical engineering, philosophy and political science.

"Essentially, we teach integrative thinking," said Gay Lorberbaum, affiliate associate professor of architecture, who co-directs the course with two other affiliate associate professors, William Wischmeyer and M. Jana Pereau. "By the end of the year, we want students to be able to integrate seven major concepts: meaning, site, program, structure/material, climate, space/light and transitions. That's not easy — frankly, it can be a challenge for any architect."

The course was first proposed by Tom Harmon, Ph.D., the Clifford W. Murphy Professor of Civil Engineering, who approached Cynthia Weese, dean of the School of Architecture, and Kevin Truman, Ph.D., chair of civil engineering, after sitting in on a sophomore design course also co-taught by Lorberbaum, Wischmeyer and Pereau.

"Civil Engineering is a very mature field and students tend to be very tightly directed because there is so much that we have to cram into their heads," Harmon explained. "They are very good



With only a 30"x40" sheet of woefully non-translucent cardboard, students in "Architecture 209: The Design Process" attempted to maximize the illumination of a single 100 watt bulb. The only stipulation: that every scrap of the cardboard be used. The above example is by William Garcia, a senior in civil engineering, and Tesa Sexton, a senior in philosophy and political science.

at solving specific problems, but there were some areas I felt they missed out on in terms of feedback and critiquing, which architecture is very good at." He added that civil engineering students who have taken the course "have found it a very strong experience that had a great impact on them."

Assignments in Architecture 209 range from the dizzyingly abstract (conceptualizing an ideal setting for music) to the maddeningly concrete (lighting a hallway with a lantern built

from a sheet of cardboard and a 100 watt bulb). A strong emphasis is placed on group critique and revision, with each project undergoing at least three "cycles," or drafts. That process, of course, is not without occasional frustrations. Of the lanterns, Lorberbaum cheerfully recalled that "by the second cycle, [students] were all getting pretty angry."

Still, the constant feedback bears remarkable fruit. "You're forced to deal with issues like light and wind and structure, and to think about how people will actually use it," noted Tesa Sexton, a senior majoring in philosophy and political science, whose worktable in Givens Hall is covered with designs for a shelter in Forest Park. Early stages include both a straightforward lean-to and a fantastic confection of sharply angled glass, but Sexton's more recent ideas have blossomed into an ambitious yet entirely plausible triangular structure complete with a hearth for winter fires and a bank of

windows to accommodate summer breezes.

"It's just amazing what these students are able to accomplish," Lorberbaum concluded. "They may not yet have the technical skills to construct everything they envision, and some of what they image would probably be impossible to actually build, but they have remarkable exuberance, a real willingness to dive in and try new things."

And that, as any professional could tell you, is the first prerequisite for success.

Sports Section

Wins extend streak

The Washington University women's basketball team's streak looked to be in dire straits when they trailed by 17 points early in the second half versus Pomona-Pitzer Colleges last weekend. WU responded, however, with a 10-0 run in three minutes with just over 13 minutes remaining. The Bears then clawed their way back to take their first lead with 1:27 remaining on three consecutive jumpers by junior forward Robin Lahargoue and then took the lead for good with just 18 seconds remaining on another Lahargoue jumper. In all, Lahargoue scored 11 of the Bears' last 15 points, along with a steal and a blocked shot in the last 10 seconds. Sara Ettner's two free throws with eight seconds remaining iced the game for the Bears, and provided the final margin, 56-53. Senior forward Tasha Rodgers led all scorers with 22 points.

WU didn't have as much trouble extending its winning streak to 74 with a 79-63 win over Claremont-Mudd-Scripps Colleges on Dec. 2. With Rodgers scoring just four points, the other Bears stepped up in her place. Ettner drained 15 points, hitting three of her eight attempts from beyond the arc. Lindsey Merrill canned 13 points, and junior transfer Kristi Eller was perfect in four attempts from downtown, scoring 12 points. The Bears led 45-34 at halftime and never looked back.

Men's hoops take Lopata Classic

Washington University's men's basketball team matched its best start ever under head coach Mark Edwards as the Bears improved to 6-0 by winning the 17th Annual Lopata Basketball Championship, Dec. 1-2 in the WU Field House. The Bears took down Beloit College, 85-64 in Friday's first round before knocking off Claremont-Mudd-Scripps Colleges, 87-63, in the championship game Saturday night. Against Beloit it was a close game throughout much of the first half before WU pulled ahead at halftime, 41-32. The Bears went up by 11 with the

first basket of the second half and cruised the rest of the way. Senior Chris Alexander led all scorers with 25 while adding seven rebounds. Fellow senior Ryan Patton had 17 points, five rebounds and three assists and sophomore Jarriot Rook had 14 points, eight rebounds and eight blocks. Dustin Tylka, added 11 points.

Against Claremont-Mudd-Scripps in the championship game the next night, the Stags took an early 7-6 lead, but an 18-4 run put WU up 24-11 en route to a 44-25 halftime lead. WU shot 46 percent in the first half, while forcing nine Stag turnovers and holding C-M-S to just nine field goals. The Bears kept the heat on early in the second half, building the lead to as much as 28 on the way to the 87-63 win. Alexander again led all scorers with 16 points to go along with eight rebounds. Rook and sophomore Chris Jeffries each grabbed 11 rebounds with Rook adding 15 points and three blocks and Jeffries tallying 13 points and five assists. Tylka again scored 11 points and Patton had six points and four assists with just one turnover. Alexander earned tournament MVP honors for the second straight year and was joined on the all-tournament team by Rook and Patton.

WU Bears shine at Swimming event

The men's and women's swimming teams both took first place finishes last weekend at the DePauw Swimming Invitational. The women's team defeated seven teams, including DePauw, Illinois Wesleyan and Ohio Wesleyan, while the men surpassed eight teams.

Elisa Annelin had the biggest day for the women. She broke three records, including making two provisional qualifying times for the NCAA Championships. She won the 100-yard breaststroke, finishing with a time of 4:44.77.

Matt Grieves led the way for the men, grabbing two provisional qualifying times. He won the 200-yard Individual Medley in a time of 1:57.92, and the 400 IM in 4:09.87.

Media to announce University closings, cancellations

If severe weather conditions cause the University to alter normal work and/or class schedules, a number of local media outlets will air the announcement. Separate announcements will be made regarding the Hilltop campus, evening classes and the School of Medicine and will apply only to Washington University students, faculty and staff.

To obtain information on University closings, watch KSDK-TV Channel 5, KMOV-TV

Channel 4, KTVI-TV Channel 2 or KDNL-TV Channel 30, or tune into radio stations KMOX-AM (1120) or WSIE-FM (88.7). Channels 5, 4, 2 and KMOX Radio will post closings on their websites, which are ksdktv.com, kmov.com, fox2ktvi.com and kmox.com, respectively.

Radio station 550 KTRS-AM will also post closings on its website, ktrs.com. It does not make on-air announcements, but has an off-air telephone snow closing information system. To

access it, dial 314-550-5877 or 314-453-5555. You will be prompted to enter an ID number. For the Hilltop Campus, the ID number is 1278; for evening classes, the ID number is 1440; and for the medical school, the ID number is 1439. If there is a closing or cancellation, it will be announced a few seconds after you enter the ID number. All KTRS snow closing announcements will be erased from the system between 2 and 3 p.m. To check for the following day, you will need to call after 3 p.m.

And more...

Friday, Dec. 8

8 a.m. Continuing Medical Education seminar. "Contemporary Women's Health Issues." Cost: \$125 physicians, \$110 allied health professionals (includes breakfast and lunch). Eric P. Newman Education Center. 362-6891.

Saturday, Dec. 9

8 a.m. Continuing Medical Education seminar. "Practical Management of Congestive Heart Failure." Cost: \$75 (includes breakfast and lunch). Eric P. Newman Education Center. 362-6891.

2 p.m. and 7 p.m. Performance art piece. "Scouring the Lawn." Kelsey LaPoint and Ali McNulty, students, sculpture dept., creators/directors. Sponsored by Tyson Research Center. Cost: \$5 (7 p.m. performance only). Tyson Research Center, Interstate 44 and Antire Rd. (exit # 269). 324-1164



Friday, Dec. 15

4 p.m. Memorial service for Prof. David Belmont. Sponsored by the classics dept. Graham Chapel. 935-5123.

5 p.m. Dollar dinner. Catholic Student Center, 6352 Forsyth Blvd. 935-9191.



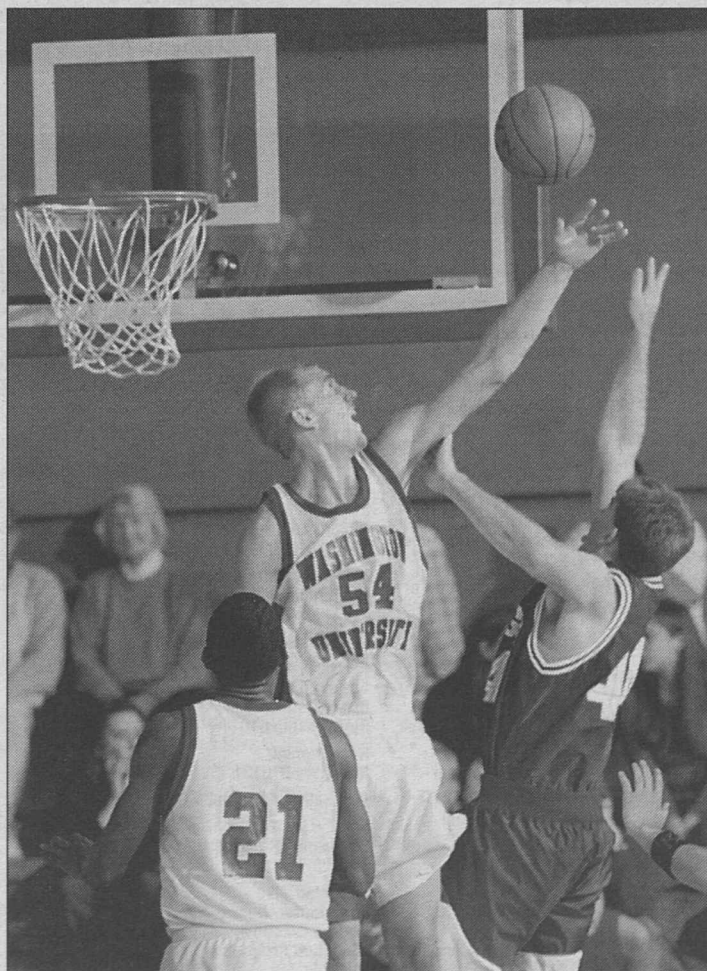
Friday, Dec. 15

11:15 a.m. Catholic Mass. Catholic Student Center, 6352 Forsyth Blvd. 935-9191.

1:10 p.m. Muslim Friday prayers. Includes sermon and prayer service. Lambert Lounge, Mallinckrodt Student Center. 935-3543.

Sunday, Dec. 17

11 a.m. Catholic Mass. Last Mass for semester. Catholic Student Center, 6352 Forsyth Blvd. 935-9191.



The WU men's basketball team continued on its winning path with triumphs over Beloit College and Claremont-Mudd-Scripps Colleges last weekend.



NATALIE MERTZ/STL

Double winner Washington University won two top awards during the St. Louis Minority Business Council's annual awards ceremony on Sunday evening, Dec. 3, at Powell Symphony Hall. Council President Eddie G. Davis, left, and Julia A. Holmes, chairperson of the selection committee and president of Concepts Marketing and Advertising, present the Institution of the Year award to Richard A. Roloff, executive vice chancellor of the University, who accepted that award, as well as one for most innovative supplier-diversity program. Criteria for the former included total sales involving minority business enterprises (MBEs); financial, educational and technical assistance to MBEs; and overall quality and innovation of the institution's MBE program. An 18-member committee representing 360 certified MBEs belonging to the Council determined the awards. The University's supplier-diversity program began just three years ago, and Davis said, "For such a young program to achieve these awards illustrates the University's significant commitment, from the Chancellor on down, to minority business enterprises."

Program

Courses offer new option for students

— from page 1

course tracks. Initially, those area studies courses will be East Asian, European and International studies. We want to form an interdisciplinary link between students and faculty by supporting various scholarly activities within the program."

The primary goal of the program is to develop a stronger and better-coordinated interdisciplinary curriculum for students with interests in the study of particular areas, as well as those with more international and global interests.

The program was established in the belief that an understanding of the world outside the borders of the United States should be an integral part of an Arts & Sciences undergraduate education.

Macias said the executive planning committee is already

"The goal really is to create a well-rounded interdisciplinary program which includes courses from both the humanities and the social sciences."

PRISCILLA STONE

working on goals and specific course work for the new program, which will most likely become a major.

Priscilla Stone, director of international studies in Arts & Sciences, said she is excited about this new program. "We currently have a number of students who come to Washington University with interests in pursuing an international course of study. We want to make sure we are adequately meeting that need," she said.

Students who enter this program would be prepared to work in any number of fields after graduation, including government,

business, education, law, or other emerging markets, Stone said.

"The goal really is to create a well-rounded interdisciplinary program which includes courses from both the humanities and the social sciences. We want to make the most of our considerable faculty strengths in these areas to help prepare students to meet the challenges ahead," Stone said.

Initiative

Report details diversity in enterprise and labor

— from page 1

hours represented 18.1 percent of the labor on capital projects in progress during fiscal year 2000. Of this percentage, 15.5 percent were minority employees and 2.6 percent were female employees. This percentage reflects a 2.9 percent decrease from fiscal year 1999.

"A substantial portion of the work performed on capital projects last year fell in categories

Supplier Diversity Initiative executive summary

- 25.3 percent of the total dollars paid out on capital projects in fiscal year 2000 were paid to minority and women-owned firms.

- 18.1 percent of the total work hours expended for work-in-progress on capital projects in fiscal year 2000 represented minority and female labor.

- To date, a total of \$14,865,718 has been awarded to minority and women-owned firms on the Campus Integration Project with BJC and the School of Medicine. The medical school pays 30 percent of the construction costs.

- 21 people completed the "Business of Construction" course held Oct. 25, 1999-Feb. 28, 2000 at the John M. Olin School of Business.

- 33 African-American ninth graders completed the first Minority Youth in Construction Summer Program held June 19-July 28.

Non-construction Suppliers

- During fiscal year 1999-

2000, six minority-owned firms were awarded preferred supplier contracts in the categories of industrial paper products and janitorial supplies, bottled water, temporary employees, printing and copy services.

- 11 minority-owned firms participated along with 19 non-minority preferred suppliers in the University's first "Supplier Diversity/Preferred Supplier Fair" held July 12 on the Hilltop Campus and July 13 on the Medical School Campus. Over 400 University representatives visited the 30 exhibitors during the two-day event.

- Loop Capital, a minority-owned firm, was one of the co-managers on a recent bond issue, and the money management firm of Buford, Dickson and Sparrow was hired to provide investment management services. Charles Stewart, CPA, a minority-owned accounting firm, was once again subcontracted by Price Waterhouse Coopers to work on the University's audit.

Enterprise Utilization (Minority-/Women-owned Contractors)

	FY '99	FY '00
Minority-Owned Firms	13%	9.6%
Women-Owned Firms	12%	15.7%
Total Minority- and Women-Owned Firms	25%	25.3%

Labor Utilization (Minorities/Women) (Capital projects work in progress)

	FY '99	FY '00
Total work hours (minorities)	18%	15.5%
Total work hours (women)	3%	2.6%
Total work hours (minorities and women)	21%	18.1%

Employment

Use the World Wide Web to obtain complete job descriptions. Go to <https://hr.wustl.edu/> (Hilltop) or <http://medicine.wustl.edu/wumshr> (Medical).

Hilltop Campus

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

Science/Engineering Librarian 990364
Lab Technician III 000241

Department Secretary 000251

Research Technician 000256

Sr. Research Assistant/Jr. Research Associate 000297

Department Secretary 000323

Research Assistant 000341

Facilities Administrative Coordinator 000351

General Services Assistant 000377

Word Processing Operator 010013

Department Secretary 010016

Retention and Academic Adviser 010017

Research Assistant 010023

Manager, Business Development 010026

Administrative Secretary 010032

Instructional Technology Specialist 010033

Associate Director of Development 010045

Media Adviser 010060

Research Technician 010061

Coordinator for Greek Facilities 010063

Financial Analyst 010066

Senior Regional Director of Major Gifts 010068

Director of Admissions and Marketing 010069

Department Secretary 010070

MBA Records Assistant 010076

Medical/Research Assistant 010084

Department Secretary 010097

Student Services and Program Coordinator 010100

Associate Director of Research Communications 010107

Senior Medical Sciences Writer 010108

Record Editor/News Writer 010109

Mechanic (Bargaining Unit Employee) 010111-2

Coordinator-Student Services 010113

Assistant Director Donor Relations for Stewardship 010114

Receptionist/Secretary 010121

Accounting Assistant 010122

Department Secretary 010123

Administrative Coordinator, Non-Degree Executive Education Program 010124

Director of News & Information for Olin School of Business 010126

Appointment Coordinator 010128

Research Assistant/Technician 010129

Transportation Service Manager 010130

Deputized Police Officer 010131, 010133

Sales Associate (part time) 010134

Administrative Assistant II 010138

Research Assistant 010140

Assistant Laboratory Preparation Specialist 010141

Assistant Dean and Academic Coordinator 010142

Assistant Auditor 010143

Accounts Payable Rep Trainee 010144

Software Engineer Systems Services 010145

Coordinator, Programming and All Campus Events 010146

Student Services Coordinator 010147

Director 010149

Admissions Assistant 010150

Sponsored Project Accountant 010151

Editor, Publications 010153

Financial Aid Coordinator 010155

Assistant Director of Development 010157

Switchboard Operator (part time) 010158

Reference Assistant 010159

Director of Capital Projects 010160

Assistant Director, Alumni & Parents Admission Programs 010164

Catalog Librarian 010166

Student Services Records Processor 010167

NIDA Center Coordinator 010169

Assistant Registrar 010170

Lan Engineer 010171

Deputized Police Officer 010172

Accounting Assistant II 010173

Administrative Assistant I 010177

Medical Campus

This is a partial list of positions at the School of Medicine. Employees: Contact the medical school's Office of Human Resources at 362-7196. External candidates: Submit résumés to the Office of Human Resources, 4480 Clayton Ave., Campus Box 8002, St. Louis, MO 63110, or call 362-7196.

Payroll Assistant 010141

Systems Manager 010267

Research Technician 010440

Statistical Data Analyst 010553

Administrative Coordinator 010585

Editorial Assistant 010676

Managing Editor 010677

Grants/Budget Specialist 010696

Secretary III 010773

Insurance Billing and Collections Assistant II 010808

Campus Watch

University Police responded to five reports of theft, one report of vandalism and one automobile accident Nov. 29 - Dec. 4. Readers with information that could assist in investigating these incidents are urged to call 935-5555. This information is provided as a public service to promote safety awareness and is available on the University Police Web site at rescomp.wustl.edu/~wupd.

Crime prevention

Campus Police announce a new campus patrol detail as part of its crime preventive initiative. This pilot program will be manned by the "Bear Patrol." The detail covers evenings and early morning hours, Sundays-Thursdays through mid-December.

Police Chief Don Strom stresses that no incidents have initiated this new detail, but construction sites on campus have made it

necessary for his department to emphasize certain patrol areas, including Millbrook Garage. "We want the Washington University community to feel comfortable and know that the campus is a safe place," he said. This is just an extension of regular patrol, and is a trial program.

The "Bear Patrol," 30 student workers in campus police, give the department another set of eyes and more visibility of a police presence on campus.

Notables

Stiffman receives Career Development Award from NIH

By ANN NICHOLSON

Arlene R. Stiffman, Ph.D., professor at the George Warren Brown School of Social Work, has received a \$567,000 Career Development Award from the National Institutes of Health. The five-year grant, which is part of the Independent Scientist Award program, is designed to "foster the development of outstanding scientists and enable them to expand their potential to make significant contributions to their field of research."

Stiffman plans to further her research into adolescents' knowledge of and access to mental-health services. Her work includes studies of two little researched topics — mental-health care problems addressed by non-specialty mental-health care providers and the use of mental-health and drug- and alcohol-addiction services among Native American youths.

While many at-risk groups turn to child welfare, schools, juvenile justice institutions and primary health care providers to address various immediate problems, mental-health needs are often

undetected or untreated in these settings. At the same time, adolescents rarely seek mental-health treatment on their own from a psychiatrist or other specialist in a mental-health services field, Stiffman said.

Her ongoing research will track youths' entry into and pathways through mental-health services provided by both specialty and non-specialty services. Stiffman will examine barriers to mental-health care including

lack of diagnosis, inaccessibility and insufficient funding. She also will look at additional hurdles faced by Native Americans, who have special provisions for health care through the federal Indian Health Service.

A member of the social work school's faculty since 1980,

Stiffman is director of the Comorbidity and Addictions, Prevention, Intervention and Treatment Center and associate director of the Center for Mental Health Services Research. She earned a bachelor's degree from the University of Cincinnati and both a master's degree and doctorate in social work from the George Warren Brown School of Social Work.



Stiffman: Honored researcher

Patient

Alumnus named Shepley Trustee

— from page 1

have such outstanding leaders join us as Shepley Trustees," Wrighton said. Shepley Trustees serve a non-renewable four-year term on the board.

In other actions, the Trustees received a faculty presentation from Michael W. Sherraden, the Benjamin E. Youngdahl Professor of Social Development in the George Warren Brown School of Social Work, on "Helping the Poor Build Assets: Individual Development Accounts (IDAs)."

Professor Sherraden has developed original, groundbreaking work that has led to a nationwide savings program helping lower-income working people make significant changes in their lives by helping them save for homes, businesses and education. Many of Sherraden's concepts have been adopted by both major political parties in their platforms.

In the Chancellor's report to the Trustees, Wrighton announced the renaming of the Center for the Study of American Business as the Murray Weidenbaum Center on the Economy, Government, and Public Policy. In addition, he announced the appointment of Steven S. Smith as the new director of the Weidenbaum Center and as the first Kate M. Gregg Professor of Social Sciences in Arts & Sciences at the University. Smith was a distinguished professor of political science at the University of Minnesota.

In his remarks, Wrighton recounted the University's highly successful experience as a host for the final presidential debate on Oct. 17, reviewed the

continuing increase in undergraduate applications, noted the success of the capital campaign, recognized several outstanding honors awarded to faculty in the past two months and announced the appointments to four endowed professorships during November alone. He also reviewed the construction progress on the Charles F. Knight Executive Education Center, Small Group Housing, Uncas A. Whitaker Hall for Biomedical Engineering and the Snow Way parking garage.

The Chancellor commented on the outstanding success of University athletic teams, including the qualification by both women's cross country and volleyball teams to their respective national championship playoffs in NCAA Division III. Both the men's and women's basketball teams are off to an excellent start, with the women extending their current winning streak to 74 — an unprecedented record for all women's basketball divisions in the nation. The men's basketball team currently is ranked number 18 in the NCAA Division III.

Following the Chancellor's remarks, National Council reports were presented for three University schools. For Art, Architecture, and the Visual Arts and Design Center, presentations were given by Trustee Lee M. Liberman and Deans Cynthia Weese and Jeff Pike of Architecture and Art, respectively. The second report, for the George Warren Brown School of Social Work, was presented by Trustee Richard F. Ford and Dean Shanti K. Khinduka. The Trustees also received reports from the following standing committees: Development, Campaign for Washington University, Educational Policy, Hilltop Finance, Medical Finance, Research-Graduate Affairs, and Student Affairs. The Alumni



Winning smiles The Washington University women's volleyball team beat Juniata College Dec. 3 on their way to a third place finish in the NCAA Division III volleyball championships. The Bears were defeated by Central College Dec. 2 to set up the consolation match with Juniata.

Lewis wins Martin de la Cruz medal

By TONY FITZPATRICK

Walter H. Lewis, Ph.D., professor of biology in Arts & Sciences, was awarded the Martin de la Cruz medal by the Mexican Academy of Traditional Medicine, Nov. 13, at a ceremony in Xochimilco, Mexico, near Mexico City. Lewis received the award for his South American research among the Jivaro Indigenous tribes in Peru.

Board of Governors also presented its report.

New trustee Patient earned his bachelor's degree in chemical engineering at the University in 1957, and began his career at American Oil Company. In 1962 he joined Borg-Warner Chemicals, where he remained until 1989, serving in two vice presidencies and as president of Borg-Warner Chemicals Europe.

In 1989 Patient became senior vice-president of BFGoodrich Company and president of its Geon Vinyl division. Four years later BFGoodrich spun off the Geon division as a separate public company with Patient as chairman, president and chief executive officer of what had become the world's largest producer of vinyl compounds used in construction, electrical equipment, appliance parts, medical devices, and many other business applications. Geon had nearly 3,000 employees and 23 manufacturing plants worldwide when it merged in 1999 with the M. A. Hanna Company, and is now known as PolyOne Corporation. Patient retired in 1999.

Committed to community service, Patient has served on the Board of Trustees of Cleveland State University for seven years and for the past two years as its chairman. He also served on the boards of Cleveland Tomorrow, National City Bank, Playhouse Square Foundation, Greater Cleveland Roundtable, University Hospitals Health System, and The Musical Arts Association—all in the Cleveland area.

Patient was honored by his alma mater in 1995 with a Distinguished Alumni Award from the School of Engineering, and in 1999 with the University-wide Distinguished Alumni Award, as well. In that same year, he received the People of Vision Award from Prevent Blindness Ohio and the John W. Hill Memorial Award. This year he was inducted into the 2000 Business Hall of Fame of *Cleveland Inside Business*.

Lewis was attending the 14th International Congress of Traditional and Alternative Therapies, sponsored by the Universidad Autonoma Metropolitana. Approximately 400 researchers attended the conference, which ran from Nov. 10-14. On Nov. 10, Lewis presented the conference keynote address, "Searching for new pharmaceuticals in partnership with the Aguaruna People of Peru."

The medal is presented in honor of de la Cruz who, as an Aztec healer, was the first indigenous person in the New World to provide data about medicinal plant uses. His body of knowledge was published as a book in 1552, well before an English-language medicinal herb volume mainly about European species was published in 1597.

For centuries, there were only two copies of de la Cruz's book, and their whereabouts were unknown. In the 1920s, the original was found in a Vatican library. Since then, many facsimiles have been produced, and one is in the Missouri Botanical Garden collection.

Lewis, an internationally known ethnobotanist, and his wife, Memory P. Elvin-Lewis, Ph.D., a professor of microbiology and ethnobotany in Arts & Sciences, have made numerous trips to the Peruvian rainforests since the early 1980s to learn about the medicinal plants used by the native tribes.

The Aguaruna, a tribe of the Jivaro Indians of the Upper Amazon Basin, still rely largely on memorization and the oral passing down of knowledge of their medicinal plants to survive. However, as increasing numbers of younger Aguaruna are exposed to the outside world, many lose interest in learning the practice of herbal medicine. Thus, with fewer numbers of Aguaruna willing



Walter H. Lewis, Ph.D., professor of biology in Arts & Sciences received the Martin de la Cruz medal for his research among the Jivaro Indigenous tribes in Peru.

to learn all of the medicinal wonders and knowledge of their elders, medicinal plant knowledge could be lost forever as well. Recording this knowledge and documenting it thus becomes as crucial an activity of the Washington University team as discovering new medicinal plant species.

The University collaborates formally with the native Aguaruna people of Peru through the International Cooperative Biodiversity Program-Peru, or ICBG-Peru, whose primary goals are to identify new pharmaceutical possibilities from medicinal plants and to promote cultural and economic support to the native Indians.

Board of Trustees announce appointments, promotions

The Board of Trustees approved the promotion with tenure of the following Washington University faculty members on Dec. 1.

School of Medicine

Promotion with tenure:

Yi Rao, to associate professor of neurobiology;

Yvette T. Sheline, to associate professor of psychiatry (effective Jan. 1, 2001).

Washington People

“I like to envision what I’m working on,” said Scott J. Hultgren, Ph.D., the Helen Lehbrink Stoevers Professor of Molecular Microbiology in the School of Medicine. “I’ve always been driven by images.” The images Hultgren and his collaborators have obtained make compelling viewing — they show bacteria assembling ammunition for assaults on the human body. Their work suggests new ways of sabotaging these invaders. With bacteria becoming more resistant to antibiotics, such novel strategies are desperately needed.

“Scott has an amazing sense of the important questions in his field,” said Gabriel Waksman, Ph.D., the Alumni Professor of Biochemistry and Biophysics. “He goes right for the most pressing and interesting problems and sets out to solve them immediately.”

Hultgren began studying *E. coli* as a graduate student at Northwestern University. This bacterium causes urinary tract infections (UTI), which afflict



Scott J. Hultgren, Ph.D., discusses the role of bacteria in urinary tract infections with a colleague.

Picturing bacteria's next move

Scott J. Hultgren, Ph.D., continues to work toward breaking down the destructive power of bacteria

By DAVID LINZEE

more than half of American women at some point in their lives, as well as some men. *E. coli*, like many other bacteria, are covered with hairlike projections called pili, which are tipped with adhesins that slot into receptors in the bladder lining. These adhesins allow the bacteria to cling and multiply.

In 1987 Staffan J. Normark, M.D., Ph.D., discovered that adhesins are minor components of pili, which are made up of thousands of protein subunits. Hultgren thought the finding opened the way to learning how these subunits were assembled. Encountering Normark at a conference, he asked him for a job on the spot—undeterred by the fact that Normark’s lab was at the University of Umea in northern Sweden, not far from the Arctic Circle.

In fact, Hultgren and his wife, Linda, found the winters were not as cold as the ones they had known in Chicago. The days were short, though, with the sun glowing faintly through the overcast for only a couple of hours. “The first day in May when the sun broke through, everybody ran out in the streets to celebrate,” Hultgren recalled. Even more joyous for the couple was the day Linda gave birth to a boy. Deciding that a Swedish name would be appropriate, they called him Nils.

In work he began at Umea and continued at Washington University when he joined the faculty in 1989, Hultgren discovered that a protein called the chaperone plays an essential role in pilus assembly. Like stern elders who take young ladies to the ball and see that they dance only with eligible partners, chaperones escort pilus subunits to the assembly point in the cell and ensure that they fit together properly. Hultgren also showed that chaperones provide the information the subunits need to fold from strings of amino acids into three-dimensional proteins.

“Scott is a multi-faceted researcher,” said Stephen M. Beverley, Ph.D., the Marvin A. Brenneke Professor and chair of molecular microbiology. “He makes observations and follows them down to the atomic level and then out to working with clinical investigators.”

Hultgren’s team hopes that studying the chaperone’s function and shape may lead to a

drug to prevent it from locking onto subunits. If bacteria could not produce pili, they could not attach and infect.

Another strategy for preventing attachment targets the adhesin, the sticky tip of the pilus. Using their knowledge of pilus assembly, Hultgren and his collaborators genetically

modified bacteria to overproduce the adhesin for use as a vaccine. It primes the immune system to produce antibodies that block the adhesins on invading bacteria, flagging them for destruction. Hultgren’s lab is collaborating on the vaccine with a Maryland biotech company called MedImmune, Inc., which has completed the first stage of human trials.

“Scott has an amazing sense of the important questions in his field. He goes right for the most pressing and interesting problems and sets out to solve them immediately.”

GABRIEL WAKSMAN

modified bacteria to overproduce the adhesin for use as a vaccine. It primes the immune system to produce antibodies that block the adhesins on invading bacteria, flagging them for destruction. Hultgren’s lab is collaborating on the vaccine with a Maryland biotech company called MedImmune, Inc., which has completed the first stage of human trials.

Hopeful UTI patients often call Hultgren about the vaccine, which is still years away from market. “This disease has been ignored for decades because it’s rarely lethal,” he noted, “and the general feeling among physicians is that antibiotics are pretty effective against it. But if you talk to women who suffer from it, you get a very different answer.”

All too often, patients who think they are over the infection find that the intense pain, burning and constant need to urinate come back. Physicians generally assume that recurrence is caused by new bacteria invading the urinary tract, but Hultgren’s team has shown that *E. coli* are able to burrow deep into the bladder lining and hide out for long periods.

“Doctors think it’s always a new infection, but really, it may often be a manifestation of a chronic state,” explained Hultgren. “If we can change the way clinicians diagnose and treat this disease, we can make a difference to millions of patients.”

Hultgren grew up in a small city on the shore of Lake Michigan, exactly 90 minutes by car from Wrigley Field. His family made the trip often to root for the Chicago Cubs, a

tradition Hultgren and his wife and son continue today.

His father, a high-school chemistry teacher, encouraged his interest in math and science at an early age. But he also had a talent for creative writing. Even when he was a college student, English professors were trying to steer him toward a career as a novelist.

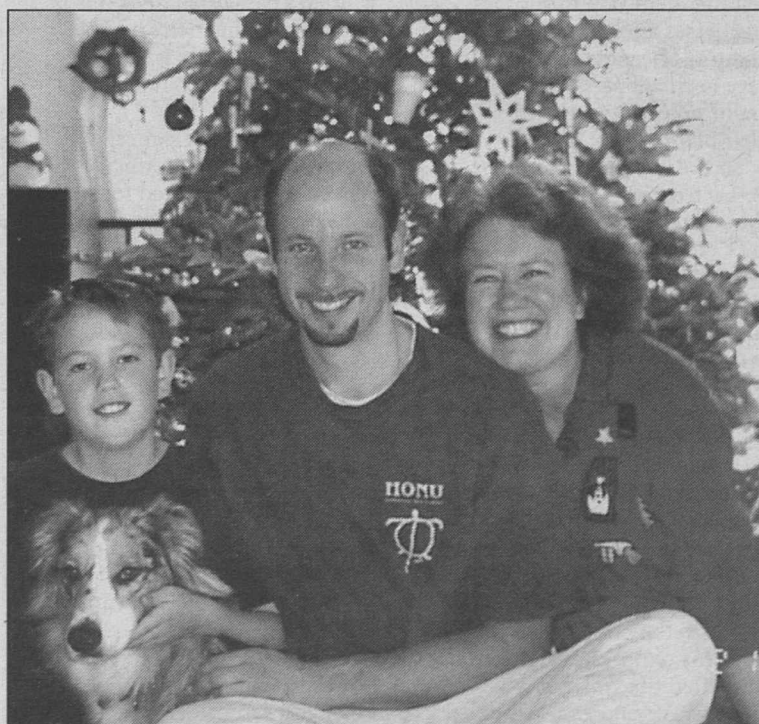
Though he chose to major in molecular microbiology, Hultgren continues to enjoy writing and helping his students with their reports. “Being able to express yourself on paper is important for a scientist,” he said. “The worst thing would be to make a fantastic discovery and muck it up by describing it poorly.” Papers from the Hultgren lab are remarkable for their lucidity and flashes of humor. A recent article in *Proceedings of the National Academy of Sciences* was titled “Bad Bugs and Beleaguered Bladders.”

Hultgren says working with students, post-doctoral fellows and faculty colleagues is his favorite part of his job. When he was named to an endowed professorship this year, he dedicated the honor to them. “Scott is a pleasure to work with,” said Carl Frieden, Ph.D., the Raymond H. Witcoff Professor and chair of the biochemistry and molecular biophysics department. “He’s full of ideas, excited about making new observations and willing to listen to everyone’s ideas—even if they’re wrong.”

In his leisure time, Hultgren enjoys losing at chess to Nils, who now is 12 and an ace at the game. On weekends, he and Linda cook together. He also loves music and is teaching himself to play piano. To stay in shape, he swims a mile a day. He finds that he has some of his best ideas while doing laps.

Hultgren has spent the last two summers working at Stockholm’s Karolinska Institute. Reveling in the chance to return to Sweden, the family stayed in an apartment overlooking the Baltic Sea and cycled around the bike-friendly city.

Hultgren has even brought a Swedish custom back to his lab. Whenever one of the researchers publishes a paper, a “fika,” or small celebration, is held. Surveying the line of empty champagne bottles in his office, Hultgren said, “For me, the most rewarding thing is to see my students and post-docs enjoy their work and score their successes.”



Hultgren enjoys the holidays with his wife, Linda and his son, Nils.

Scott J. Hultgren, Ph.D.

Born Michigan City, Ind.

Education Indiana University at Bloomington, B.S.1981; Northwestern University Ph.D. 1988

University position Helen L. Stoevers Professor of Molecular Microbiology

Family Wife Linda, son Nils, 12

Honors Nobel Fellowship, Eli Lilly Award