Anthropologist completes first full survey of Missouri's rock images

Carol Diaz-Granados, Ph.D., a research associate and lecturer in the Department of Anthropology in Arts & Sciences, has doubled the known number of Missouri's native American rock images — petroglyphs and pictographs — in the state's first systematic survey of prehistoric "rock art." Rock art refers to both petroglyphs (carvings in stone) and pictographs (painted or drawn images).

Diaz-Granados' findings have been published in a book titled "The Petroglyphs and Pictographs of Missouri," which documents 134 sites of rock art images. Only 65 to 70 were known before she began her work in 1983.

"I personally prefer the term 'rock images' or 'rock graphics,' because I believe they are more about communication than about art," said Diaz-Granados, who has made petroglyphs and pictographs her life's work. "The Petroglyphs and Pictographs of Missouri," which was based on her two-volume dissertation, contains 86 drawings and 56 photographs and was published by the University of Alabama Press this spring. Diaz-Granados' husband, Jim Duncan, is listed as a co-author because of his help in the field and contributions to the section on mythology.

Petroglyphs and pictographs are found all over the state, according to Diaz-Granados. "Where there is rock," she said, "you usually find rock art." Petroglyphs are found on exposed bluffs, bluffs, near springs, and usually on dolomite, limestone or granite. Pictographs are almost always on sandstone and usually on a slightly protected area, such as under a bluff overhang or inside a shelter or cave.

"People don't think of Missouri as being a Mecca for rock art, but we do have an unusually large number of sites in the state," Diaz-Granados said.
Rainforest Plants hold promise of TB treatment

Weather permitting, an exposure of TB in the remote parts of the Upper Amazon has been minimal, and the remote tribes, including the Aguarauna, have little experience with the disease, making the discovery of the inhibitory plant samples even more significant, Walter Lewis and his wife, Memory Elwin-Lewis, Ph.D., professor of microbiology and ethnobiology 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 Aguarauna, a tribe of the Upper Amazon, live in the Amazon Basin, still rely largely on self-treatment and oral transmission of their knowledge of medicinal plants to survive. As increasing numbers of younger Aguarauna are exposed to the outside world, many lose interest in learning the practice of herbal medicine, thus, with fewer and fewer numbers of Aguarauna willing to learn all of the medicinal wonders and knowledge of their elders, medicinal plant knowledge could be lost forever. Recognizing this knowledge and documenting it thus becomes crucial for the Washington University team as discoverers of the inhibitory plant species.

A prime reason that tropical rainforest plants are so valuable is that they produce above-average amounts of secondary metabolites, such as alkaloids, compounds that protect them from huge numbers of pathogens and insects. Plant survival is dependent on their genetic ability to produce a wide range of these defensive compounds. Lewis believes he found such a high anti-TB reactivity across the broad range of plants because the plants have shared sensitivities that "allow secondary metabolites to inhibit the growth of M. tuberculosis at these unexpectedly high frequencies," he said. The amount of anti-TB activity found in TB was surprising partly because researchers were not expecting the plants to be so specifically effective against it. "If you can find a plant that does something so specific, a plant that does something so specific, it can be really helpful in implementing safe and effective drugs," he added.

"It is the largest industrial system we know of in the world, and the technology we're creating is exportable," the University team as discoverers of the inhibitory plant species. The amount of anti-TB activity found in TB was surprising partly because researchers were not expecting the plants to be so specifically effective against it. "If you can find a plant that does something so specific, it can be really helpful in implementing safe and effective drugs," he added.

Excitement Philip V. Baryik, Ph.D. (left), associate professor of mechanical engineering, demonstrates for students from St. Louis' Metro High School the string of a reaction to a stirling engine. The students examined oscillations by looking at the system with a strobe light, and then observed a classical instance of nonlinear behavior. Students were on the engineering campus and at Boeing Co. laboratories for seven weeks this summer as part of the Boeing/Washington University Advanced Manufacturing Research and Development program with the school, intended to expose bright students to engineering careers. Jerry Halley, a Boeing employee and Baryik's graduate student in mechanical engineering, coordinated the program.

Firm gives University three valuable patents

‘We’re happy that Praxair recognizes our talents, abilities and our international reach with CICERO,’ Cicero said. "We’re delighted to receive the patents, which are valuable in opening up new directions for research at CREL," Cicero said. "We’re happy that Praxair recognized our talents, abilities and our international reach with CICERO. We’ve developed the patented technology over to people who can do the most for it." Added Dudukovic: "CREL’s mission is to support academic and design of multiphase systems, which is consistent with how we continuously improve our technology to come out of this research and develop it further. We’re happy that Praxair recognizes our talents, abilities and our international reach with CICERO. We’ve developed the patented technology over to people who can do the most for it."
Researchers find lowering systolic blood pressure reduces incidence of stroke

Researchers have found that lowering systolic blood pressure can prevent or delay the onset of hypertension, a condition that appears after 55 and increases with age. Physiologically, physicians have paid more attention to diastolic blood pressure but this study found that lowering systolic pressure is important for cardiovascular disease prevention.

The research project, sponsored by the National Institute on Aging, is one of the group's original goals of 300,000. The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

Two professors honored for research

Lorne Berg, M.D., and Allan McPherson, M.D., who have both given many years of service to the School of Medicine, have received career-crowning honors.

Berg, professor emeritus of neurology and former director of the Alzheimer's Disease Research Center, and McPherson, professor of genetics, have received a three-year planning grant for the Alzheimer's Disease Research Center.

Berg graduated from the School of Medicine in 1961. He, who has given almost two years of service to the School of Medicine, has received career-crowning honors.

McPherson, who has received the National Institutes of Health totaling $4.9 million. Ley, who has received three five-year grants of $1 million or more to fund the National Institute on Aging, for distinguished research in Geriatrics and Gerontology and founder and co-director of the center, "but then I turned around."

"The genome of any two people vary approximately by one base pair, which is not enough for genetic information—out of 1,000. These variances can be seen in an individual's DNA sequence between individuals.

Two years later, the first human genome was completed by a privately funded project, called the Human Genome Project, which was launched in 1990 and was composed of a collaborative effort to identify and map all the genes in the human genome.

The SNP Consortium, a collaborative research project, was launched in 1997 with funding from pharmaceutical companies. Twenty-four companies have been involved in the project, which is now entering its fifth year.

Because SNPs occur frequently and are dispersed throughout the human genome, they have become valuable tools for researchers. A high-density SNP map will help researchers locate disease genes and will complement the working draft of the human genome, completed last year.

The project was completed by December 2000. McPherson said that the project's main goal was to find more than half a million SNPs, surpassing the SNP Consortium's original goal of 300,000. The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

Applying now for cancer research grants

Applications are now being accepted for awards from the University of Washington's American Cancer Society, the National Cancer Institute, the American Cancer Society Foundation, the American Cancer Society or Veterans Affairs are not eligible. Applicants must be U.S. citizens or have proof of permanent residency at the time of application.

Each application should include a letter from the department chair voicing the interest of the department in the center. All new cancer-related research projects and significant institutional projects must be reviewed and approved by the St银川 Cancer Research Institute's National Cardiovascular Science and Research Division.

Throughout the project, investigators may call David R. Johnston, M.D., Ph.D., study chair, at 286-2834, or e-mail Sharon E. Heath (sharone@
cam.wustl.edu) to obtain a Web address for the individual.

McPherson said, knowing a patient's genetic profile will enable the physician to choose the right medicine and avoid ones that would cause side effects. The SNP Consortium's data also could speed the development of new drugs.

In addition, it could help biomedical researchers learn why some people are more likely than others to develop diseases such as cancer. It could also be a boon to anthropologists, who study the different SNPs among human populations in order to study evolution, as well as the development of groups of people throughout history.

The project will be completed by December 2000. McPherson said that the project's main goal was to find more than half a million SNPs, surpassing the SNP Consortium's original goal of 300,000. The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

Sequence Center receives $5 million grant

The School of Medicine's Genome Sequencing Center has received a $5 million grant from the National Institute of Health.

The research project began in April 1999, when an international collaboration called the SNP Consortium was established with funding from charitable trusts and pharmaceutical companies. Twenty-four anonymous donors of varying ethnic groups and nationalities provided their DNA, which was put into a common bank, then divided into manageable lengths for sequencing. The work is being performed by the medical school, the Whithead Institute for Biomedical Research in Cambridge, Mass., and the Sanger Center in the United Kingdom.

Because SNPs occur frequently and are dispersed throughout the full complement of human DNA, they make valuable tools in the study of human diseases.

A comprehensive internal medicine review course will be held Aug. 24-27 at the Cybernetic Systems Institute. The course is designed for physicians seeking to arrive at a diagnosis. The American Board of Internal Medicine and the American Board of Family Medicine have stated that physicians seeking a recertification in internal medicine must be familiar with the course.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The Alzheimer's Disease Research Center has received a five-year $12.4 million grant from the National Institute on Aging, which has funded the center since 1985. Eugene M. Johnson Jr., M.D., professor of neurology, co-direct the center, "but then I turned around."

"The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The research project, sponsored by the National Institute on Aging, is one of the group's original goals of 300,000. The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

"The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

"The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.

The centers are releasing their data on the Internet, making it available to researchers around the world for free of charge.
Olin Library acquires ‘Triple Crown Collection’ of rare books

By Liane Ottos

Washington University's Olin Library has acquired a major collection of rare Arts and Crafts-era books and related ephemera. The aptly named "Triple Crown Collection" includes 150 volumes printed by the Kelmscott, Doves and Ashendene presses. The collection, built by Californian Charles Gould over a period of 68 years, recently was acquired by Olin Libraries' Special Collections.

The Triple Crown purchase "represents a very important moment over a period of 68 years; it will have an immediate impact," said the collection "would have an obvious connection to the Arts and Crafts era, and would exert lasting influence on 20th-century art, architecture, design and bookmaking," he said. "It is a treasure trove of well-crafted objects that would be of interest to anyone interested in the arts, and would provide employment for skilled artisans."

The Arts and Crafts movement began in England in the late 19th century, inspired by the social concerns of artists and writers like Walter Crane and John Ruskin. The movement, which would exert a lasting influence on 20th-century art, architecture, and bookmaking, aimed to create beautiful, well-crafted objects that would lead the way for new ways of working, according to the Washington Post.

For more information, call 935-6679. The collection home page is http://rescomp.wustl.edu/calendar/events/.

Worship

Tuesday, Aug. 15

6 p.m. Options and Assumption Mass. Catholic Student Center (French Hall 315)

Saturday, Aug. 26

4 p.m. Options and Assumption Mass. (Mass Aug. 27, 7 a.m. and 9 a.m. Catholic Student Center)

Olin Library acquires ‘Triple Crown Collection’ of rare books

By Liane Ottos

Washington University's Olin Library has acquired a major collection of rare Arts and Crafts-era books and related ephemera. The aptly named "Triple Crown Collection" includes 150 volumes printed by the Kelmscott, Doves and Ashendene presses. The collection, built by Californian Charles Gould over a period of 68 years, recently was acquired by Olin Libraries' Special Collections.

The Triple Crown purchase "represents a very important moment over a period of 68 years; it will have an immediate impact," said the collection "would have an obvious connection to the Arts and Crafts era, and would exert lasting influence on 20th-century art, architecture, design and bookmaking," he said. "It is a treasure trove of well-crafted objects that would be of interest to anyone interested in the arts, and would provide employment for skilled artisans."

The Arts and Crafts movement began in England in the late 19th century, inspired by the social concerns of artists and writers like Walter Crane and John Ruskin. The movement, which would exert a lasting influence on 20th-century art, architecture, and bookmaking, aimed to create beautiful, well-crafted objects that would lead the way for new ways of working, according to the Washington Post.

For more information, call 935-6679. The collection home page is http://rescomp.wustl.edu/calendar/events/.

Worship

Tuesday, Aug. 15

6 p.m. Options and Assumption Mass. Catholic Student Center (French Hall 315)

Saturday, Aug. 26

4 p.m. Options and Assumption Mass. (Mass Aug. 27, 7 a.m. and 9 a.m. Catholic Student Center)

Olin Library acquires ‘Triple Crown Collection’ of rare books

By Liane Ottos

Washington University's Olin Library has acquired a major collection of rare Arts and Crafts-era books and related ephemera. The aptly named "Triple Crown Collection" includes 150 volumes printed by the Kelmscott, Doves and Ashendene presses. The collection, built by Californian Charles Gould over a period of 68 years, recently was acquired by Olin Libraries' Special Collections.

The Triple Crown purchase "represents a very important moment over a period of 68 years; it will have an immediate impact," said the collection "would have an obvious connection to the Arts and Crafts era, and would exert lasting influence on 20th-century art, architecture, design and bookmaking," he said. "It is a treasure trove of well-crafted objects that would be of interest to anyone interested in the arts, and would provide employment for skilled artisans."

The Arts and Crafts movement began in England in the late 19th century, inspired by the social concerns of artists and writers like Walter Crane and John Ruskin. The movement, which would exert a lasting influence on 20th-century art, architecture, and bookmaking, aimed to create beautiful, well-crafted objects that would lead the way for new ways of working, according to the Washington Post.

For more information, call 935-6679. The collection home page is http://rescomp.wustl.edu/calendar/events/.

Worship

Tuesday, Aug. 15

6 p.m. Options and Assumption Mass. Catholic Student Center (French Hall 315)

Saturday, Aug. 26

4 p.m. Options and Assumption Mass. (Mass Aug. 27, 7 a.m. and 9 a.m. Catholic Student Center)

Olin Library acquires ‘Triple Crown Collection’ of rare books

By Liane Ottos

Washington University's Olin Library has acquired a major collection of rare Arts and Crafts-era books and related ephemera. The aptly named "Triple Crown Collection" includes 150 volumes printed by the Kelmscott, Doves and Ashendene presses. The collection, built by Californian Charles Gould over a period of 68 years, recently was acquired by Olin Libraries' Special Collections.

The Triple Crown purchase "represents a very important moment over a period of 68 years; it will have an immediate impact," said the collection "would have an obvious connection to the Arts and Crafts era, and would exert lasting influence on 20th-century art, architecture, design and bookmaking," he said. "It is a treasure trove of well-crafted objects that would be of interest to anyone interested in the arts, and would provide employment for skilled artisans."

The Arts and Crafts movement began in England in the late 19th century, inspired by the social concerns of artists and writers like Walter Crane and John Ruskin. The movement, which would exert a lasting influence on 20th-century art, architecture, and bookmaking, aimed to create beautiful, well-crafted objects that would lead the way for new ways of working, according to the Washington Post.

For more information, call 935-6679. The collection home page is http://rescomp.wustl.edu/calendar/events/.

Worship

Tuesday, Aug. 15

6 p.m. Options and Assumption Mass. Catholic Student Center (French Hall 315)

Saturday, Aug. 26

4 p.m. Options and Assumption Mass. (Mass Aug. 27, 7 a.m. and 9 a.m. Catholic Student Center)

Olin Library acquires ‘Triple Crown Collection’ of rare books

By Liane Ottos

Washington University's Olin Library has acquired a major collection of rare Arts and Crafts-era books and related ephemera. The aptly named "Triple Crown Collection" includes 150 volumes printed by the Kelmscott, Doves and Ashendene presses. The collection, built by Californian Charles Gould over a period of 68 years, recently was acquired by Olin Libraries' Special Collections.

The Triple Crown purchase "represents a very important moment over a period of 68 years; it will have an immediate impact," said the collection "would have an obvious connection to the Arts and Crafts era, and would exert lasting influence on 20th-century art, architecture, design and bookmaking," he said. "It is a treasure trove of well-crafted objects that would be of interest to anyone interested in the arts, and would provide employment for skilled artisans."

The Arts and Crafts movement began in England in the late 19th century, inspired by the social concerns of artists and writers like Walter Crane and John Ruskin. The movement, which would exert a lasting influence on 20th-century art, architecture, and bookmaking, aimed to create beautiful, well-crafted objects that would lead the way for new ways of working, according to the Washington Post.

For more information, call 935-6679. The collection home page is http://rescomp.wustl.edu/calendar/events/.

Worship

Tuesday, Aug. 15

6 p.m. Options and Assumption Mass. Catholic Student Center (French Hall 315)

Saturday, Aug. 26

4 p.m. Options and Assumption Mass. (Mass Aug. 27, 7 a.m. and 9 a.m. Catholic Student Center)

Olin Library acquires ‘Triple Crown Collection’ of rare books

By Liane Ottos

Washington University's Olin Library has acquired a major collection of rare Arts and Crafts-era books and related ephemera. The aptly named "Triple Crown Collection" includes 150 volumes printed by the Kelmscott, Doves and Ashendene presses. The collection, built by Californian Charles Gould over a period of 68 years, recently was acquired by Olin Libraries' Special Collections.

The Triple Crown purchase "represents a very important moment over a period of 68 years; it will have an immediate impact," said the collection "would have an obvious connection to the Arts and Crafts era, and would exert lasting influence on 20th-century art, architecture, design and bookmaking," he said. "It is a treasure trove of well-crafted objects that would be of interest to anyone interested in the arts, and would provide employment for skilled artisans."

The Arts and Crafts movement began in England in the late 19th century, inspired by the social concerns of artists and writers like Walter Crane and John Ruskin. The movement, which would exert a lasting influence on 20th-century art, architecture, and bookmaking, aimed to create beautiful, well-crafted objects that would lead the way for new ways of working, according to the Washington Post.

For more information, call 935-6679. The collection home page is http://rescomp.wustl.edu/calendar/events/.

Worship

Tuesday, Aug. 15

6 p.m. Options and Assumption Mass. Catholic Student Center (French Hall 315)

Saturday, Aug. 26

4 p.m. Options and Assumption Mass. (Mass Aug. 27, 7 a.m. and 9 a.m. Catholic Student Center)

Olin Library acquires ‘Triple Crown Collection’ of rare books

By Liane Ottos

Washington University's Olin Library has acquired a major collection of rare Arts and Crafts-era books and related ephemera. The aptly named "Triple Crown Collection" includes 150 volumes printed by the Kelmscott, Doves and Ashendene presses. The collection, built by Californian Charles Gould over a period of 68 years, recently was acquired by Olin Libraries' Special Collections.

The Triple Crown purchase "represents a very important moment over a period of 68 years; it will have an immediate impact," said the collection "would have an obvious connection to the Arts and Crafts era, and would exert lasting influence on 20th-century art, architecture, design and bookmaking," he said. "It is a treasure trove of well-crafted objects that would be of interest to anyone interested in the arts, and would provide employment for skilled artisans."

The Arts and Crafts movement began in England in the late 19th century, inspired by the social concerns of artists and writers like Walter Crane and John Ruskin. The movement, which would exert a lasting influence on 20th-century art, architecture, and bookmaking, aimed to create beautiful, well-crafted objects that would lead the way for new ways of working, according to the Washington Post.

For more information, call 935-6679. The collection home page is http://rescomp.wustl.edu/calendar/events/.
Rock images

Researchers complete state's first full survey — from page 1

The eastern half of the state, Diaz-Granados said. "This is a very important period because of the heavy activity by Native Americans around both the Kansas and Missouri rivers, along with the influence from the Midwest and the central plains, which is important to understand this chronology and the development of these cultures throughout the state."

Among the most common images in Missouri are the bird, foot, serpent, quadrupeds, anthropomorphic and abstract designs. The three most typical motifs are the bind, the serpent and a variety of quadrupeds such as deer and elk. Diaz-Granados said the bird image is explained by the American Indian belief in a cosmos divided into three distinct but related worlds: the earth world (symbolized by the birds), the middle world (represented by the quadrupeds) and the lower world (the snakes).

Because rock art is primarily above ground, it is particularly susceptible to vandalism and weathering.

"The recording of these fragile prehistoric documents, as any endangered site, should be a priority in each state's preservation efforts," Diaz-Granados said. "Diaz-Granados returned to the University of Missouri to complete his Ph.D. when her own children were grown. She noted that from 1989 to 1991 she and her former sons were all college or graduate school at the same time. She first became interested in rock art in 1983, when, as a graduate student in archaeology, she was engaged by the Missouri Department of Conservation to write a report on the petroglyphs at the Rocky Hollow site in Monroe County."

"It was a lovely site, one of the best I've ever seen," Diaz-Granados said. "It is located in a small canyon with a river running through it and petroglyphs on both sides. When I saw the site I fell in love with rock art. I had no idea before I did my research project that Missouri had so many of these fascinating images. They are definitely worthy of study and preservation."

John Hu (left), first-year graduate student in mechanical engineering, and Joseph Herman, junior mechanical engineering major, view a design of a variable stroke engine in Jolley Hall's computer-aided design laboratory as Mark J. Jaksela, Ph.D., the Lee Hunter Professor of Mechanical Design, looks on. The model was designed by mechanical engineering senior Christopher Zepak, who used Unigraphics Solutions Solid Edge and Unigraphics software for the project. Unigraphics Solutions Inc. and the engineering school have teamed up in a $4.5 million partnership that allows mechanical engineering students to use Unigraphics software.

Partnership provides advanced software

BY TOST FITZPATRICK

U nders an imaginative new partnership between the School of Engineering and Applied Science and St. Louis, Unigraphics Solutions Inc. (UGS), two computer-assisted design (CAD) software packages worth $4.5 million have been made available to the University's engineering students.

"Students in mechanical engineering design courses have been using both packages. The first, Unigraphics, a broad-based mechanical engineering aid, allows students — and engineers on the job — to design objects and assemblies of objects, providing realistic animations to test a system's components and mechanically simulate machines. The second, Solid Edge, is a dimensional engineering design tool that is a 3D design system that greatly facilitates the initial modeling of objects. Students in introductory mechanical design courses use Solid Edge, while students in junior- and senior-level courses use both software packages."

"Just three years ago, our advanced undergraduates were not exposed to this kind of CAD experience," said Mark J. Jaksela, Ph.D., the Lee Hunter Professor of Mechanical Design, who initiated the partnership with Unigraphics Solutions. Jaksela and Jerry Craig, adjunct professor of mechanical engineering, teach the design courses that use the software.

"We've found that exposure to the real-world materials makes teaching concepts much less abstract and more descriptive," Jaksela continued. "This software prepares students for the world after college. It has improved both teaching and learning, and we're grateful for Unigraphics Solutions' support of the project."

"We are thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a longtime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a lifelong friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a lifetime friend of the Edison Theatre, I'm thrilled to be returning — in some ways I feel I never left," he said. "As a lifetime friend of the Edison Theatre, I'm thrilled to be re..."
Kornfeld

Appointed to new Farrell Professorship

from page 1

Medicine in this manner. It is also a pleasant task to have a distinction bestowed on you when Stuart Kornfeld, one of the world’s greatest scientists, has been your former chairman and chief executive officer. Stuart Kornfeld has been the driving force behind the board of the local council of Boy Scouts of America for the Saint Louis Community Foundation, The Saint Louis Art Museum and other organizations. He chairman’s efforts for the United Way of Greater St. Louis, the Salvation Army and The Arts & Education Community. Betty Farrell is a dedicated community volunteer. Among other activities, she helped lead a fund-raising effort for an archaeology project at the University, has been a board member of the Saint Louis Art Foundation and has served on a commission for the Missouri Botanical Garden. Kornfeld co-directs the Division of Hematology and is a professor of medicine and of molecular biophysics. He has made groundbreaking discoveries about how direct protein movements occur within cells. Sugar chains give proteins specificity and serve as antennae, leading to cell-surface adjustments that allow proteins to travel to their correct destinations by the way address determines where mail is sent. In his early research days, Kornfeld uncovered the structure of many sugar chains involved in forming sugar chains that are linked to the amino acid asparagine. He conducted much of this work in collaboration with his wife, Howard Kornfeld, who is professor of medicine and of molecular biophysics.

Stuart Kornfeld is best known for his research into how lysosomal enzymes are routed to lysosomes, as well as structures that serve as garbage disposal. He identified two enzymes that add a specific sugar marker onto lysosomal enzymes. And he determined how the two request the enzymes they need to label.

In addition, he was one of the two recipients that recognize the chemistry on normal enzymes and determined where in the cell this interaction occurs. He also delineated the pathways the receptors take to get lysosomal enzymes to the appropriate molecular conveyor belt to reach lysosomes.

Kornfeld’s work has led to the idea that how lysosomal enzymes that fail to be recycled inside cells can be recycled to lysosomes by adding a special sugar marker. More recently, he has identified other molecular players involved in this process.

Kornfeld has received numerous awards. He received the Award in 1991 and the Karl Meyer Award from the Society of Experimental Biology. He is a co-author of more than 200 scientific papers and a member of the honorary societies including the American Philosophical Society, the Institute of Medicine, the American Academy of Arts and Sciences, and the American Physicists. He also has served on governmental and advisory boards.

Kornfeld received a medical degree from the University in 1962 and joined the faculty here four years later. He became a professor of medicine in 1972 and of biochemistry in 1979. That same year he began co-directing the hematology division of the Medical Scientist Training Program from 1991 to 1997.

Stroke

Lowering systolic pressure reduces incidence of stroke

from page 3

systolic blood pressure goal: a decrease of 20 mm Hg to a systolic blood pressure below 140 mm Hg. Perry and colleagues found that effectively lowering systolic blood pressure reduced the incidence of all strokes, both hemorrhagic and ischemic. There were significantly fewer ischemic strokes among those in the active treatment group than those in the placebo group.

Due to the small number of ischemic strokes that occurred during the study (29 vs. 19), the difference between treatment and placebo groups was not statistically significant.

The decrease in hemorrhagic strokes seemed to occur during the first year of treatment, while the decrease in ischemic strokes did not occur until the second year of treatment.

There was no significant difference in the percentage of fatal strokes. Although there were 65 percent more fatal strokes among placebo participants as compared with active treatment participants, in both groups just under 10 percent of the strokes that did occur were fatal,” Perry said.

Perry noted that while the two groups’ nursing home admissions and Activities of Daily Living (ADL) scores were similar, the consistently higher number of days of reduced activity, including days in bed, suggests that patients in the active treatment group were less disabled when they had strokes than among active-treated patients.

Although 67 percent of the strokes among stroke patients in the active treatment group were neonatal, when they had a stroke than those in the placebo group.

jobs finally received validation of their work by the psychiatric community when they helped create the American Psychiatric Association’s (APA) DSM-III (Diagnostic and Statistical Manual of Mental Disorders). The manual immediately became a best seller and is still in use today. With colleagues, he also wrote a textbook for followers of the Watsonian school of thought. “Psychiatric Diagnosis” was published in 1974 and is considered a classic.

In addition to his scientific accomplishments, Guze led the school as vice chancellor for medical affairs during a time of rapid expansion and changes in medical research. He was appointed vice chancellor and president of the Washington University Medical Center in 1971, positions he held until 1975. He was also the head of the Department of Psychiatry from 1975 to 1997. In 1997, he served on the faculty for almost 50 years. He also served as psychiatrist-in-chief at Washington University School of Medicine and St. Louis Children’s hospitals.

Guze, considered an outstanding, internationally recognized psychiatrist who now are leaders in psychiatric institutions. He and his wife, Joy, established the Samuel H. Guze Professorship in Psychiatry in 1998. To Guze, the first holder of the professorship, who is current head of the department of psychiatry at Johns Hopkins, M.D., said:

“Guze was one of the greatest superstars of Washington University, a brilliant scientist, an outstanding educator, a strong leader of the University and on all of us, his many colleagues.”

Guze was born in New York City Oct. 18, 1923. He attended the Washington University and its School of Medicine, where he received his medical degree in 1945.

“I’ve lost my best friend, and my country and medical school have lost one of the greatest,” said M. Kent Johnson, M.D., professor emeritus and former dean of the medical school.

Guze published more than 200 scientific papers and several books. He was also recipient of numerous awards. His most recent honor was received in January when he was awarded the William James and Salmon Medal from the New York Academy of Medicine.

“Other and” made the Sarn Ritter Prize in Mental Health from the Institute for Contemporary Archaeology and the Hamilton Medal and the Paul High Award from the American Psychoanalytic Association, Distinctive Public Service Award from the Department of Health and Human Services and an Alumni/Faculty of Medicine Award from Washington University.

Guze was a member of the Institute of Medicine, Alpha Omega Xi and the Psychiatric Research Society; a fellow of many other groups, and a fellow of the American College of Physicians, American Academy of Arts and Sciences, National Academy of Science and Royal College of Psychiatrists.

Guze may be made to the Samuel B. Guze Research Professor of Psychiatry at the School of Medicine, Campus Box 8314, 660 S. Euclid, St. Louis, MO 63110. The fund has been established by former students and colleagues of the Guzes’ research.

Guze’s body was donated to medicine for teaching and research, in accordance with his wishes.

A memorial service will be held at 4 p.m. Sept. 10 in Graham Chapel, followed by one mile walk and a service.

Guze was survived by his wife of 54 years, by Cannon-Galea C. Guze, and a daughter, Jennifer D. Guze of Danbury, N.C., and a daughter, Jeremy Ann Opitz of Danbury, N.C., five grandchildren and colleagues and friends.
Melissa Early Ruwitch has been named coordinator of health and wellness at Washington University, according to Karen Levin Coburn, assistant vice chancellor for students and associate dean for the freshman transition. Ruwitch replaces Mimi Weiss, who left the University in May. Ruwitch oversees an office committed to furthering a community that supports every student's physical, well-being, including providing access to programs and services designed to enhance their personal health and wellness. Ruwitch will coordinate efforts in the campus community to promote healthy living environments, with the goal of developing lifelong habits that help students achieve their fullest potential.

Ruwitch also will continue to serve as co-chair of the University's Alumni and Parents Admission Program. According to David T. Blasingame, vice chancellor of Alumni and Development, and John A. Berg, associate vice chancellor for undergraduate admissions, Ruwitch, who had served as the program's director of alumni and parents at the entry level since late June, was senior assistant director of the program for four years. She will manage the program’s four-person staff and approximately 3,000 alumni and parents in 66 communities across the United States and in six foreign countries. The program allows more than 4,500 applicants to be interviewed each year by alumni in their home communities and also connects parents of applicants with current students to act as resources.

Robyn Neuhalfen appointed APAP director

Robyn Neuhalfen has been named APAP director. An outstanding post-professional doctoral student who has shown scholarly productivity and potential to contribute to research in neuropsychological physical therapy, Lang also received a $15,000 grant from the Alzheimer’s Disease and Aging Center to pursue her work.

On assignment

John Drobak, J.D., professor of law, helped run the third annual "Adopt-a-Doc" award from the National Association for Physical Therapy’s Leadership Program. The $15,000 award is given to an outstanding post-professional student who has shown scholarly productivity and potential to contribute to research in neuropsychological physical therapy. The $7,500 award is given to post-professional students who have shown potential for scholarly productivity, clearly outline career goals and an intent to promote the profession of physical therapy. In addition, Katherine Lang, a physical therapy graduate student, received the Milt Ross Award. "A drop-a-Doc" award from the Ross Fellowship Society of the American Physical Therapy Association.

Speaking of

John C. Morris, M.D., the Harvey A. and Dorisene Harker Fried-Robertson professor of neurology and co-director of the Alzheimer's Disease Research Center, has participated as an invited speaker in the sixth Conference of Neurogenetic Disorders: Common Molecular Mechanisms in Tobago, West Indies. Morris presented an international panel of neuroscientists on "Lewy Body Dementia: A Systematic Approach to Geriatric Medicine." The $10,000 award is given to an outstanding post-professional student who has shown scholarly productivity and potential to contribute to research in neuropsychological physical therapy. The $7,500 award is given to post-professional students who have shown potential for scholarly productivity, clearly outline career goals and an intent to promote the profession of physical therapy. In addition, Katherine Lang, a physical therapy graduate student, received the Milt Ross Award. "A drop-a-Doc" award from the Ross Fellowship Society of the American Physical Therapy Association.

For the Record

Of note

Rajiv Bhatnagar, M.D., Ph.D., recently was awarded the 2000 Kofod-Larsen Pharmacology Prize by the Division of Biology and Biomedical Sciences (D. B.). The D. B. also gave an award to Laurie O'Brien. The Kofod-Larsen award is presented to an outstanding female graduate student, in her final year of a Ph.D. or M.D. program, who has focused on the general area of molecular physiology.

Katrina Mahal, a graduate student in the program in Physical Therapy, received the 2000 W.M. Doherty and the promotion of doctoral studies. Mahal is the promotion of doctoral studies. The $7,500 award is given to post-professional students who have shown potential for scholarly productivity, clearly outline career goals and an intent to promote the profession of physical therapy. In addition, Katherine Lang, a physical therapy graduate student, received the Milt Ross Award. "A drop-a-Doc" award from the Ross Fellowship Society of the American Physical Therapy Association.

Speaking of

John C. Morris, M.D., the Harvey A. and Dorisene Harker Fried-Robertson professor of neurology and co-director of the Alzheimer's Disease Research Center, has participated as an invited speaker in the sixth Conference of Neurogenetic Disorders: Common Molecular Mechanisms in Tobago, West Indies. Morris presented an international panel of neuroscientists on "Lewy Body Dementia: A Systematic Approach to Geriatric Medicine." The $10,000 award is given to an outstanding post-professional student who has shown scholarly productivity and potential to contribute to research in neuropsychological physical therapy. The $7,500 award is given to post-professional students who have shown potential for scholarly productivity, clearly outline career goals and an intent to promote the profession of physical therapy. In addition, Katherine Lang, a physical therapy graduate student, received the Milt Ross Award. "A drop-a-Doc" award from the Ross Fellowship Society of the American Physical Therapy Association.

Speaking of

John C. Morris, M.D., the Harvey A. and Dorisene Harker Fried-Robertson professor of neurology and co-director of the Alzheimer's Disease Research Center, has participated as an invited speaker in the sixth Conference of Neurogenetic Disorders: Common Molecular Mechanisms in Tobago, West Indies. Morris presented an international panel of neuroscientists on "Lewy Body Dementia: A Systematic Approach to Geriatric Medicine." The $10,000 award is given to an outstanding post-professional student who has shown scholarly productivity and potential to contribute to research in neuropsychological physical therapy. The $7,500 award is given to post-professional students who have shown potential for scholarly productivity, clearly outline career goals and an intent to promote the profession of physical therapy. In addition, Katherine Lang, a physical therapy graduate student, received the Milt Ross Award. "A drop-a-Doc" award from the Ross Fellowship Society of the American Physical Therapy Association.
Among them, Lynn Imergoot (left), Shelly in 89 years as staff at Camp Starlight in Pennsylvania. Imergoot is the camp's program director.

Under Lynn Imergoot, shown here giving student Lauren Mertz pointers on her grip, the University's women's tennis team has been ranked among the best in the country.

Passionate coach garners many honors
Lynn Imergoot is staunch advocate for women athletes

By Deb Aronson

B

Bash, Educated, Passionate.

These adjectives— which Lynn Stockman Imergoot uses to describe the late Bella Abzug, one of her heroes— would certainly fit her, too. Even after living in the Midwest for close to 30 years, Imergoot is the first she says hasn't lost a bit of her New York accent or her competitive streak. But that competitive streak is tempered by her conviction that it is "important to honor those people who came before you." In her 28 years at Washington University, Imergoot, assistant athletic director and women's tennis coach, has earned her share of honors. She is currently the winningest coach on the NCAA Division III National Tennis Championships for the first time ever.

Imergoot has received numerous awards, including women's tennis coach of the year from the University Athletic Association in 1989, 1990, 1991 and 1995, the Missouri Women in Sport Leadership Award and the Central District Scholar Award from the American Alliance for Health, Physical Education, Recreation and Dance (AHPERD). She also was inducted into the St. Louis Jewish Sports Hall of Fame in 1998.

"I've lived in St. Louis for more than half my life," she said. "I am proud to be a model for other Jewish women. And it was a good feeling to be the one female among a bunch of guys to get the award." Imergoot has received a staunch advocate for women in athletics.

"Too often we forget how things were before our time," Imergoot said, explaining her efforts to honor women athletes from many years ago. "My players—all of whom were born in the 1980s— don't know about Billie Jean King and her match against Bobby Riggs, much less Wilma Rudolph and other outstanding female athletes who blurred the trail.

Recognition

Partly because of this, Imergoot has worked hard to generate recognition for women athletes. She led the effort to establish the University's endowed A. Gwendolyn Drew Award in 1985. The award honors Drew—a physical education teacher and the first female full professor at Washington University—and recognizes exceptional academic achievement by a male and a female senior varsity athlete.

Imergoot also nominated the late Helen Manley, a leader in the field of health and physical education, for an honorary doctorate from the University, a vote that Manley received in 1986.

"The history and development of women in sports is so inspiring," noted John M. Schael, athletic director. "And that passion goes beyond the Hilltop Campus. It includes changing taking place for the national level."

Imergoot attended the Bronx High School of Science, one of the most competitive high schools in the country. She played many sports, though her passion was tennis. "I loved handball, and I'd pull against the boys every chance I got," she recalled. "Until I was 14 or 15. That is, and the boys hit puberty. Then they were just too strong, and I hated to lose."

At Science she met her first role model, Fran Feuerstein Moskowitz, a graduate of the school herself and Imergoot's gym teacher.

"In the era I grew up in, girls became either nurses, secretaries or teachers," Imergoot said. "After meeting Fran, I knew I wanted to be a New York City high school gym teacher."

At Science she switched to tennis from handball. After Moskowitz introduced her to an indoor version, Imergoot continued to play tennis in college on the varsity team. In 1978, after receiving a master's degree from the University of Illinois, Imergoot became a physical education teacher and coach at White Plains (New York) High School. In 1972, she saw an advertisement for the Washington University position.

"I had cousins in St. Louis I had become friendly with, and I thought, here's a chance to take a free trip out to see them!" She remembered with a laugh."

By the end of the visit, Imergoot had accepted the position and met Michael Imergoot, who was a graduate assistant in the physical education department and a baseball player who was married for two years, and another woman. And it was true to her beliefs. If Imergoot also recently became a grandmother when her daughter gave birth in June to Tamia Alexis Harris.

Imergoot claimed to have dreams of coaching tennis for 25 years at Camp Starlight in Pennsylvania. "I don't think I'd be a New York City high school tennis coach without going through the University of Illinois, Imergoot said. "There are some great players at Washington University who planned both her own and camp schedules."

"The history and development of women in sports is so inspiring," noted John M. Schael, athletic director. "And that passion goes beyond the Hilltop Campus. It includes changing taking place for the national level."

"The history and development of women in sports is so inspiring," noted John M. Schael, athletic director. "And that passion goes beyond the Hilltop Campus. It includes changing taking place for the national level."

The same could be said of Imergoot.

Lydia Stockman Imergoot

Born and raised in New York

Family: Daughter, Jennifer, 19, University of Missouri; St. Louis; son, Douglas, 22, graduated from Indiana University; granddaughter, Tamia Alexis Harris.

Education: B.A. Lehman (Hunter) College, New York; M.A. University of Illinois, in physical education; certificate in writing for the professional, Washington University.

Hobbies: "My work is my play."