Examining the Brain's Interior

Dr. Joel Perlmutter uses PET imaging to scan for solutions to movement disorders.
The Campus Bugle

Campaign tops $1.3 billion

“Thanks a billion, and more”

Thanks to the generosity of more than 80,000 Washington University alumni, parents, and friends who have already supported the Campaign for Washington University, and to the many volunteers who have added a gift of time, the $1.3 billion goal “to accelerate the University’s ascent among the world’s premier universities” was surpassed in December 2002.

“Challenging? Yes, very! Doable? Certainly! That is what I always told people when they asked about reaching this prodigious goal,” said Chancellor Mark S. Wrighton. “But I also told them the success of future generations depends on us. I told them we can make the world a better place.

“I just wish I could find some fresh new way to say ‘Thank you!’ to John McDonnell and Sam Fox for the extraordinary leadership they have provided in the quiet public phases of the Campaign, and to the many, many volunteers and friends who have supported this initiative,” continued Wrighton.

“The tremendous momentum the University is experiencing is directly tied to their investments of time and money, and all of us at Washington University are extremely grateful.”

Without those investments there would be no National Cancer Institute-designated Alvin J. Siteman Cancer Center ... no Sam Fox Arts Center ... no Center for the Aging ... no state-of-the-art facilities like Uncas A. Whitaker Hall for Biomedical Engineering, Anheuser-Busch Hall for the School of Law, Charles F. Knight Executive Education Center for the John M. Olin School of Business, Alvin J. Goldfarb Hall for the George Warren Brown School of Social Work, or Laboratory Science Building for Arts & Sciences. Washington University wouldn’t be the national model when you talk about initiatives in the life sciences. Many talented, deserving students would not be enrolled here, because they and their families didn’t have the resources to make that possible. And the University would have just about half of the endowed professorships it now has—still the best incentive there is to attract and retain the outstanding faculty all top teaching and research universities need.

“We always knew the Washington University family would come through,” said Sam Fox as he reflected on the success of the Campaign, “but we also anticipated that we might reach our dollar goal without securing all of the resources needed to fund critical Campaign objectives that are among the $1.5 billion in high priority needs identified in Project 21. So, in order to fulfill those objectives and adhere to the University’s mission of best serving both its students and wider society, we will continue the Campaign as scheduled. We have a great deal to be proud of. Now it is time to drive for the finish.”

(See related item on page 7.)
2 Frontrunners
Short takes on WU's community of great minds and great ideas.

8 Sam Fox Arts Center
Celebrated architect Fumihiko Maki is designing the new Sam Fox Arts Center, which will bring together the School of Architecture, School of Art, Department of Art History and Archaeology in Arts & Sciences, the Gallery of Art, and the Art & Architecture Library.

10 Scanning the Brain to Understand Movement Disorders
Using PET technology, Dr. Joel Perlmutter is examining the brain's interior to discover better treatments for diseases such as Parkinson's, essential tremor, and dystonia.

14 Closing the Achievement Gap
Teach for America is making an impact on American public education—addressing educational inequity in the most under-resourced schools. Washington University alumni are part of the program.

18 Protecting Intellectual Property
Since September 11, 2001, law school Professor Charles McManis has committed his academic career to bridging the gap between the industrialized and developing worlds in the complex, burgeoning area of intellectual property law—for the benefit of all.

22 Engineering Cues for Nerve Regeneration
In her biomedical engineering laboratory, Assistant Professor Shelly Sakiyama-Elbert has created a viscous gel that delivers protein cues for regenerating nerves damaged by disease or trauma.

25 Saying “Yes” to People in Need
From a tiny office 25 years ago, alumna Bernie Wong has developed the Chinese American Service League of Chicago into the largest bilingual social service agency in the Midwest.

28 Race Against the Machine
Alumnus Sherman James' “John Henryism Hypothesis” states that the psychological stress resulting from persistent social and economic oppression contributes to health problems in African Americans.

31 Getting More from His Business
Alumnus Alan Bender has turned a little start-up into a giant in the telecommunications industry, T-Mobile.

34 My Washington
Shi Hui Huang, H.S. ’59, has been a good friend of the University for more than 40 years, including serving as the first chair of the International Advisory Council for Asia.

36 Alumni Activities
Tom Brokaw was the keynote speaker at the 2002 Founders Day celebration; alumni across the nation once again participated in the “Month of Caring.”

38 ClassMates
A series spotlighting key faculty and staff who help make this great University run.
Comparing Mice and Men

Researchers at the University's Genome Sequencing Center had special reason to celebrate publication of the nearly complete draft of the mouse's genetic blueprint in December 2002 for all to see freely. After all, they, like center researchers who worked on the draft of the human genome released two years ago, played a major role in the feat. They contributed about one-third of the DNA sequence of the mouse and led a group of scientists from the United States, England, Germany, Japan, Spain, and Switzerland in analyzing the sequence and comparing it to the human genome.

The new map shows that men and mice are very similar genetically. Both possess about 30,000 genes, and 99 percent of the genes found in mice have counterparts in humans. This means scientists can more readily manipulate mouse genes to mimic human ailments, a first step toward developing treatments.

The most striking finding to emerge from the genetic comparison is that the huge stretches of genetic materials in between genes, dismissed in biology classrooms for generations as "junk DNA," actually contain essential instructions as to how the body should use its genes. Many scientists believe these genetic materials may hold the keys to understanding complex diseases such as cancer, strokes, and heart attacks. It's likely such diseases develop not because the genes, which encode important proteins, are broken, but because the instructions for how to use those genes are scrambled.

Mount Presents T.S. Eliot Lecture


Volleyball Bears Finish Second in Nation

The women's volleyball team finished second in the nation in the NCAA Division III Volleyball Tournament. Though they lost to the University of Wisconsin at Whitewater in the finals on December 7, 2002, in Whitewater, the Bears had an outstanding season with a record of 41-2. Seeking a Division III-record eighth national title, the team began the season with a 31-match winning streak and finished with a record of 16-2 against nationally ranked teams.

Setter Rebecca Rotello (right), Arts & Sciences Class of '03, a first-team All-American, was named the American Volleyball Coaches Association Division III Player of the Year. She led the Bears with 1,644 assists, an all-time single-season record at Washington University.

A three-time All-American, Rotello finished her career with 4,672 assists, good for second place in University history. Middle blocker Amy Brand, Engineering Class of '04, and outside hitter Colleen Winter, Arts & Sciences Class of '05, were named second-team All-Americans.

During the season, Coach Rich Luennemann recorded his 700th career victory and coached the 1,000th match of his career.

Kohn Retrospective Reveals Artist's Spirit

To honor William R. Kohn, B.F.A. '53, distinguished professor emeritus of art, the School of Art presented an exhibition, titled *Bill Kohn: A Forty-Year Retrospective*, at the University's Des Lee Gallery in St. Louis. Kohn hosted performances of some of his multimedia works.

The exhibition not only revealed Kohn's consistency, centered on the classic fundamentals of painting, but also showed his enduring spirit of bold experimentation. It traced Kohn's evolution as an artist, from abstraction to figuration to his signature pieces—luminous landscape studies of natural and architectural forms.

Included are some of his earlier works, such as a watercolor of the Bamiyan Buddha in Afghanistan; *Sears Sundial: Four PM* (1985), in which the famous Chicago skyscraper casts a long shadow over a cityscape in golds and purples; *Grand Canyon, Plateau Point* (1992), an epic, cinematic vision of rocky, pink and blue mesas; plus more recent works, such as *Giotto* (2002), showing the crowded, umber roofs of Florence, Italy; and *Baglioni* (2002), an acrylic of the famous Duomo, or cathedral, in Florence.

A world traveler, Kohn has found subjects in places ranging from small towns of Andalusia to the heights of Machu Picchu, from Parisian bridges to Southwestern vistas, and from pyramids in Mexico to the sandstone fortress of Jaisalmer in India.

Kohn joined the art school faculty in 1963, and he retired in 1996.
Ervin Scholars Celebration Shows Vitality

In October 2002, about 500 people enjoyed celebrating the 15th anniversary of the University's Ervin Scholars Program, which recognizes the intellectual, leadership, and service achievements of African-American students.

Ervin Scholars alumni include many attorneys; bankers; community activists; university faculty members, including one at Harvard University and one at Washington University's Olin School of Business; musicians; physicians; social workers; teachers; and many other professionals.

Guests at celebratory events included Mrs. John B. (Jane) Ervin and more than half of the program's alumni, as well as current and prospective Ervin Scholars, parents, community supporters, and University leaders. Events included a presentation on the University's recently acquired Henry Hampton Collection, an extensive collection on the civil rights movement; a brunch, at which students, alumni, and parents spoke on the importance of, and rewards of, practicing service; and a dinner dance.

The University founded the program in 1987 in honor of John B. Ervin, nationally renowned black educator, who was the first African American to be a dean at the University. The community leader, who was committed to a quality education for all, died in 1992.

The program includes awarding at least 10 scholarships annually to African-American students entering as freshmen. Each scholarship is for four years and consists of full tuition and a $2,500 annual stipend. Longtime supporters of the program include the Danforth Foundation.

This year the program was expanded, thanks to a generous gift from the Taylor Family and the Enterprise Rent-A-Car Company. Joining the celebration were the first students of the Enterprise Rent-A-Car Scholars Program.

New Medical School Dean Is Chosen

Larry J. Shapiro, A.B. '68 (biology), M.D. '71, an internationally renowned research geneticist and pediatrician associated with the University of California, San Francisco (UCSF), School of Medicine, will become Washington University's executive vice chancellor for medical affairs and dean of the School of Medicine on July 1, 2003.

He will succeed William A. Peck, a worldwide osteoporosis expert and recognized leader in public policy, who, in 2001, announced his intention to retire effective June 30, 2003. Peck, who has held those positions for 13 years, will continue as the Alan A. and Edith L. Wolff Distinguished Professor in Medicine and will lead an effort to establish a University center for health policy.

Shapiro is the W.H. and Marie Wattis Distinguished Professor and chair of the Department of Pediatrics at the University of California, San Francisco, School of Medicine. He has been chief of pediatric services at UCSF Children's Hospital since his arrival there in 1991.

After graduating from Washington University's medical school in 1971, Shapiro completed a two-year residency in pediatrics at St. Louis Children's Hospital.

He then spent two years as a research associate in human biochemical genetics at the National Institute of Arthritis, Metabolism, and Digestive Diseases, in Washington, D.C.

He spent the next 15 years at the University of California at Los Angeles School of Medicine, where he became a professor of pediatrics and biological chemistry and then chief of the Division of Medical Genetics.

A Chicago native, Shapiro is married to Carol-Ann Uetake. He has three grown children, two of whom are University alumni.

Good Design, Good Business

The atrium of Nokia Corp. headquarters in Espoo, Finland, demonstrates the relationship between good design and a company's success, a topic covered in the 2002 Eugene Mackey Lecture for the School of Architecture, given by Nokia chairman and chief executive officer Jorma Ollila. Titled "Managing a Culture of Innovation," the talk, held in Steinberg Auditorium, was cosponsored by the University's Olin School of Business.
Technology Revolutionizes Job Hunt

Sometimes students and prospective employers just can't make connections for in-person interviews on campus. This past year, law students happily had new teleconferencing and online options. For example, second-year law student Ryan Witt, who was looking for a summer internship, was not available to interview when a representative of the law firm Adams and Reese, LLP, came to campus. However, William J. Kelly III, recruiting committee chairman for the firm, which has attorneys in key cities along the Gulf South and in Washington, D.C., was impressed by Witt's résumé and wanted the firm to interview him. Wanting to save the time and money involved in travel, they decided to interview using the School's new videoconferencing system. The firm did offer Witt an internship, but, ultimately, he chose another offer.

The law school provides an online option, too. By participating in the Virtual Interview Portal,™ the law school received computers outfitted with video cameras sent by Treeba, Inc.™ This allowed students and firms to participate in a Web-based virtual-text-and-video interview, which, for at least one student, resulted in a job. "We're using technology-based resources to offer and coordinate many recruiting activities," says Mark W. Smith, associate dean of the law school. "They help students and employers research, screen, and interview for jobs globally—without constraints of time and geography."

Second-year law student Ryan Witt and Rachel Koehler, associate director of career services at the law school, explore videoconferencing.

WUSTL Named Best for Financial Resource Use

Washington University received the highest score in the nation for wise use of financial resources, according to a survey done by Charity Navigator, a national organization devoted to providing in-depth, objective analysis of U.S. nonprofit organizations.

The online organization, created in 2001 to provide a guide to intelligent giving, evaluates 2,000 nonprofits nationwide. This is the first time it has issued a top 10 list. Other nonprofits in the top 10 are New York University, Give Kids the World, YWCA of Seattle-King County/Snohomish County, Columbia University, Boys & Girls Clubs of America, Center for Community Self-Help, the University of Notre Dame, The 92nd Street Y, and Academy Foundation. The organization says, "These 10 charities make a habit of excellence."

The organization uses charities' tax returns to rate them in seven areas: fund-raising efficiency; fund-raising expenses; program expenses; administration expenses; long-term sustainability; primary-revenue growth and program-expenses growth; and working-capital ratio, which measures how long a charity's reserves will allow programs to continue in a depressed economy.

Radical, New Therapy to Improve Cancer Treatment

Today, even the best cancer treatments kill about as many healthy cells as they do cancer cells. But John-Stephen A. Taylor, professor of chemistry in Arts & Sciences, has a plan to improve that ratio.

He and colleagues have developed a radical, new strategy for chemotherapy that will turn existing drugs into smart bombs against cancer. They're looking to turn the genetic blueprint of cancer against itself. "Cancer is an informational problem, a typographical error in the DNA's genetic coding that produces an altered protein," Taylor says. "The 'bad' protein either triggers cell proliferation or disables systems designed to prevent cells from dividing too much."

Current treatment, based on viewing this as a chemical-reaction problem, seeks to make drugs to attack the bad protein, but it takes a very long time to develop such drugs and there is no guarantee of success.

Taylor's strategy is to turn an individual's specific genetic material into a poison-releasing trigger. To accomplish that, a patient is injected with a "prodrug"—a powerful poison that has been rendered innocuous by a "molecular key" and a "molecular lock." The key will spring the lock only if the two are brought together by binding to genetic material specific to the cancerous state—a mutated or overexpressed messenger RNA (the trigger). Then, the poison will be unleashed only in the cancerous cells. Such a mechanism for releasing poisons could lead to highly efficient killing of cancer cells while sparing normal cells.

Someday, one could go to a doctor's office, have a biopsy analyzed for DNA, and have customized catalytic and produg components administered within hours.

A similar approach could work for some viral diseases, such as AIDS, hepatitis, and herpes. It also could help fight newly detected bioterrorism agents.

Love Story Makes Case for Understanding

The Midwest premiere of Shooting Magda, a piercing Israeli-Palestinian love story by Joshua Sobol, widely considered Israel's greatest playwright, was presented in November 2002 by the Performing Arts Department in Arts & Sciences. Sobol attended the first of five performances in the University's A.E. Hotchner Studio Theatre, all of which were sold out in advance.

The play, Sobol's 1984 examination of cross-cultural love and individual identity, dramatizes the personal consequences of political events. Its characters, including Magda, whose life is being captured on film, deal with terrorism and violence—from differing perspectives.
People Around Campus

Ira J. Hirsch, the Edward Mallinckrodt Distinguished University Professor Emeritus of Psychology and Audiology, was honored with a symposium at the 143rd Annual Meeting of the Acoustical Society of America. Legal Services of Eastern Missouri presented a Community Service Award to the School of Law Career Services Office for its longstanding commitment to public service work as well as its increased focus in recent years on public service employment for its students and graduates.

Soyinka Addresses Black Arts & Sciences Festival

As part of the weeklong Black Arts & Sciences Festival in fall 2002, Nobel Prize–winning writer Wole Soyinka (right) visited with students and delivered the keynote address during the Assembly Series. Soyinka's works deal with the struggle for democracy in Nigeria, his homeland. His lecture, titled "Art and the Politics of Theatre," also served as the kickoff for the St. Louis Black Repertory Company's symposium celebrating its 25th anniversary. The company's founder and managing director, Ronald J. Himes, B.S.B.A. '78, founded the group while he was a University student.

The Academic Women's Network received the 2002 Women in Medicine Leadership Development Award from the Association of American Medical Colleges. In honor of David M. Becker's 40th year teaching law, the School of Law announced the creation of the David Becker Public Service Fund. Becker is associate dean for external relations and the Joseph H. Zumberalen Professor of the Law of Property.

Elaine Berland, associate dean of the Graduate School of Arts & Sciences, received the 2002 Friend of Graduate Professional Students Award from the Association of American Medical Colleges. Berland was honored for her path-breaking work in cave archaeology and for helping introduce the scientific method into archaeological studies.

Alison J. Whelan, M.D. '86, H.S. '89, associate professor in the Departments of Medicine and Pediatrics and associate dean for medical student education in the medical school, has won this year's Emerson Electric Excellence in Teaching Award. Five professors have been named to endowed professorships: Randall L. Calvert, the Thomas E. Eagleton University Professor of Public Affairs & Political Science in Arts & Sciences; Ronald A. Leax, the first Halsey Cooley Professor of Art; Charles R. McManis, the first Thomas and Karole Green Professor of Law; Gustav Schoenfeld, A.B. '56, M.D. '60, the first Samuel E. Schechter Professor of Medicine; and Elzbieta Sklodowska, Ph.D. '83, professor of Spanish in Arts & Sciences, the first Raymond R. Randolph, Lee Schroth Randolph, Paula Schroth Krummenacher, and William R. Randolph Professor.

Science and Industry Collaborate

More than a year ago, Pratim Biswas, the Stifel & Quinette Jens Professor of Environmental Engineering Science and professor of chemical and civil engineering, imagined a program in which leading companies could partner with environmental engineers at the University.

The idea became reality, and now seven companies, including Ameren, Anheuser-Busch, Boeing, and DuPont, each pay $3,000 in annual dues to view and guide early research on projects that could evolve into commercial applications for their industries. For example, with Ameren, a St. Louis-based power company, Biswas' team is working on a way to remove potentially harmful particles and mercury from the exhaust of coal-fired power plants. The team also plans to work to cut carbon-dioxide emissions.

Twice a year, Biswas, his colleagues in environmental engineering sciences, and graduate students present their early research to their industry partners. The companies can single out ideas they'd like to pursue by funding further studies, and they can suggest new directions for the work. Also, students can serve as interns at the companies, and company scientists can share information with the research team. The result has been wide-ranging lab projects with practical applications, projects that could lead to cleaner air, safer drinking water, and ways to combat biological attacks.

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Discoveries Unveiled at Science Writers’ Conference

When more than 140 science writers, scientists, and science journalism educators from America and Canada got together for a conference in October at the University, they were able to see a tantalizing, broad array of new science initiatives and discoveries.

Attending the 40th annual New Horizons in Science Briefing, a program of the Council for the Advancement of Science Writing (CASW), participants heard presentations and talked informally with scientists in diverse fields ranging from biomedical science to cosmetology. The conference also featured demonstrations, such as the one shown above, in which Philip V. Bayly, associate professor of mechanical engineering, uses a device to measure the impact of soccer-heading, allowing study of possible head damage.

Renowned scientists from eight institutions, including 18 from the University, participated.

Glowing Colors Aid Brain Research

By developing mice with nerve tracts stained with up to four different fluorescent jellyfish proteins, each of which glows a different color when exposed to the correct energy of light, University researchers now can watch how neural connections change in the brains of living animals. "I believe these methods will transform not only neurobiology, but also immunology and studies of organs such as the kidney, liver, and lung," says Jeff W. Lichtman, professor of anatomy and neurobiology.

He, along with Joshua R. Sanes, the Alumni Endowed Professor of Neurobiology, and other colleagues, developed the mice to study how information is encoded in our nervous systems.

Using an advanced technology such as low-light-level digital imaging, confocal microscopy, and two-photon microscopy, the investigators can observe over time nerve cells and the synapses that interconnect them within the brain. Two-photon microscopy uses a powerful infrared laser that can selectively stimulate the fluorescent proteins in the nerve cells deep within the brain to glow. This approach permits imaging the brain without having to penetrate the skull.

Computerized techniques then produce 3-D images of neural connections in the animal, enabling researchers to watch how patterns of connections between neurons change during learning and development.

Australia Adopts Idea to Break Poverty Cycle

To help Australians with low incomes break the poverty cycle, two major Australian organizations have partnered to create that country's first matched savings program—one based on the American model developed by Michael W. Sherraden, the Benjamin E. Youngdahl Professor of Social Development at the George Warren Brown School of Social Work and director of the School’s Center for Social Development.

Partners in the program are ANZ (the Australia and New Zealand Banking Group Ltd.), a leading banking and financial services group, and the Brotherhood of St. Laurence.

The program pilots with low-income families in Melbourne and Sydney early in 2003, with an eye toward developing a national plan in 2004. A savings account for educational purposes will be set up for each participant, and for each dollar a participant deposits, ANZ will deposit two. Financial education classes will be held, too.

Sherraden's research on matched savings accounts, which he calls Individual Development Accounts (IDAs), shows that when low-income earners build assets, they are more able to reach important life goals.

Programs are in Canada, the United Kingdom, and the United States, where more than 250 IDA programs exist. Funding comes from public sources and private entities, such as the Ford Foundation and business corporations.

Celebration Begins with Founders Week

Founders Week, from September 14–20, 2003, will mark the official kickoff of the University's yearlong celebration of its 150th anniversary.

On Sunday, September 14, an open house will be held for the St. Louis community. Activities will include demonstrations, exhibits, games, and lectures. In the evening, the Saint Louis Symphony Orchestra will perform in Brookings Quadrangle.

On Friday and Saturday, September 19 and 20, there will be activities for alumni and other guests visiting from throughout the nation and world. For information, visit 150.wustl.edu.

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Linebacker Wins "Academic Heisman"

At the annual awards dinner of the National Football Foundation and College Hall of Fame—a black-tie affair at the Waldorf-Astoria in New York City in December—University linebacker Brandon Roberts, Engineering Class of '03, was nearly speechless when he won the top award. Typically, though, he recovered nimbly, accepting the prestigious HealthSouth Draddy Award, the so-called Academic Heisman. Roberts, who plans to go to medical school, is the first non-Division I player to receive the award, which comes with a $25,000 post-graduate scholarship and a trophy. The award is based on athletic and academic performance, as well as community service.

Roberts, who had 338 tackles and 12.5 sacks in his collegiate career, carries a 3.6 grade-point average in biomedical engineering, sings in the Visions gospel choir, and is an active volunteer with the Big Brothers—Big Sisters program.

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Entrepreneurial Spirit Is Rising

More and more students are adding entrepreneurial activity to their college life. They're creating business plans; securing capital; hiring employees; and monitoring expenses, income, profit, and loss as they bring their own or other entrepreneurs' business ideas to life.

Entrepreneurial spirit is visible in Gregg Residence House in businesses that are owned and operated by University undergraduates. Providing services for students, the businesses include Nate's Place, offering cellular service and the Princeton Review test-preparation service; Off the Row, specializing in personalized apparel and Greek Life gifts; U-Trucking/ResFridge, which provides moving and storage services and rental of dorm-sized refrigerators and microwave ovens; South 40 Video, a video-rental store; and Wash U Wash, a laundry/dry-cleaning delivery service.

Entrepreneurial spirit is also showing in the Olin School of Business, in which there are nearly 500 undergraduate and M.B.A. students in the entrepreneurship program—up from just 150 in the program in 2000. A major reason is the School's Skandalaris Program in Entrepreneurial Studies established in 2001 through a $3 million gift from Robert Skandalaris, a University trustee, and his wife, Julie.

Kenneth A. Harrington, program director, says the entrepreneurship curriculum has expanded and the number of "Hatchery" projects has doubled. In these projects, teams of Olin undergraduates and M.B.A. students create plans for their own businesses or for others' business ideas.

Two of the seven undergraduate entrepreneurs who own and operate U-Trucking/ResFridge on campus show the types of microwave oven and refrigerator their store offers for students to rent.

Chronic Stress Is Linked to Disease

Although many have long suspected a link between stress and health problems, Gregory E. Miller, assistant professor of psychology in Arts & Sciences, and his colleagues have completed a study that suggests a scientific basis for that idea. The study, published in an American Psychological Association journal, documented a specific hormonal process through which chronic stress compromises the human immune system.

The study compared health experiences of 25 parents caring for children with pediatric cancer and experiences of 25 parents caring for healthy children. Researchers used surveys to confirm that parents of children with cancer clearly suffered from chronic stress. Next, they used blood tests to document abnormalities in the immune systems of the stressed parents.

Specifically, the white blood cells of worried parents showed a significantly diminished response to cortisol, a hormone responsible for terminating the immune system's inflammatory response to various illnesses and infections. These findings suggest that parents' bodies could be left in an ongoing state of inflammation if they become infected when stressed.

"These findings suggest a pathway through which stress could influence medical conditions that involve excessive inflammation, which is the case in many common diseases of adulthood—problems such as rheumatoid arthritis, heart disease, and respiratory infections," Miller says.

The good news from the study is that parents who received strong social support, such as assistance in coping with the economic and emotional challenges of their child's illness, were able to lessen the detrimental effects of chronic stress, including most of the immunologic consequences detailed in the study.
In the late 1950s, Washington University commissioned a young Japanese architect named Fumihiko Maki, then teaching at the School of Architecture, to design a new home for the Gallery of Art, the Art & Architecture Library, and the Department of Art History and Archaeology in Arts & Sciences. The result was Steinberg Hall, Maki's first building and a landmark of modern St. Louis architecture.

Today, Maki is one of the world's most celebrated architects, a recipient of the Pritzker Prize, the profession's equivalent to the Nobel, and he is directing his efforts once again to the Hilltop Campus. In December 2002, Chancellor Mark S. Wrighton unveiled Maki's designs for the new $56.8 million Sam Fox Arts Center, a five-building complex (on the southeast end of the Hilltop Campus) that will serve as a campus-wide resource for the study and promotion of the visual arts.

Named in honor of Sam Fox, one of St. Louis' most prominent civic and philanthropic leaders, the Sam Fox Arts Center will integrate Steinberg with two new limestone buildings—a 65,000-square-foot art museum and a 38,000-square-foot facility for the School of Art—and the recently renovated Bixby and Givens halls, current homes to the Schools of Art and Architecture.

"By bringing art, architecture, and art history into a consortium with our museum and library, we are embarking on a new approach to arts education," says Mark S. Weil, director of the Sam Fox Arts Center and the E. Desmond Lee Professor for Collaboration in the Arts. "Our goal is to move away from separate practices and toward a more interactive and cross-disciplinary training that takes greater advantage of contemporary technology."

Fox, who has described Washington University as "the place where the whole world came alive for me," is the founder, chairman, and chief executive of Harbour Group Ltd., a privately owned company specializing in the acquisition and development of manufacturing companies for long-term investment. A 1951 business graduate of the University, he is an emeritus trustee and chairman of the public phase of the University's current $1.3 billion Campaign for Washington University. He and his wife, Marilyn, have long been active in numerous business, civic, and cultural organizations.

"Sam Fox is among Washington University's most loyal and dedicated supporters," says Chancellor Mark S. Wrighton. "We are deeply indebted to him for his longstanding generosity and his many years of devoted service. The Sam Fox Arts Center will bring together artists, designers, architects, educators, students, patrons, and the public in a world-class facility that promises to become a landmark for the entire region."

Each of the five participating units will benefit from significant increases in programming space as well as the use of shared and interdisciplinary facilities, such as a student/faculty gallery and the 13,000-square-foot Kenneth and Nancy Kranzberg Information Center. Additionally, the art school will be able to consolidate programs currently scattered among three off-campus facilities, while the entire complex, which also includes a sculpture garden and reflecting pool, will be knitted together by a series of outdoor plazas and courtyards.

To date, more than $41 million has been raised toward the project, both through the allocation of University funds and the receipt of outside commitments, including a $10 million gift and bequest from Fox. Major commitments also have come from—among others—Ken and Nancy Kranzberg, Linda and Harvey Saligman, the children of Florence Steinberg Weil, and the Bernoudy Foundation. Recently, the J.E. and L.E. Mabee Foundation awarded a $1 million challenge grant in support of the museum building. To receive the grant, the University must raise an additional $5.8 million toward the facility by October 9, 2003.

Liam Otten is a senior news writer in the Washington University Office of University Communications.
Recognizing the Importance of Planned Gifts • Washington University in St. Louis

☐ Washington University is already included in my estate plans—I would like to become a Robert S. Brookings "Partner."

☐ I am age 60 or over. Please send me a personalized, confidential calculation using the following birthdate(s) to illustrate the very attractive benefits that I will receive from a Washington University Charitable Gift Annuity.

I would like a calculation based on a theoretical gift of:

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First Beneficiary Birthdate Second Beneficiary Birthdate
Relationship Relationship

☐ Please send me your booklet on Charitable Gift Annuities.

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☐ Please have Steven Rosenblum, Paul Schoon, Lynnette Sodha, or Mark Weinrich from the Washington University Planned Giving Office call me.

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Try a Washington University Gift Annuity. Here’s how …

As you review your personal financial plan, you may find that a Washington University Charitable Gift Annuity can be helpful to you if you are age 60 or older. Here’s one way you can receive guaranteed income for life and make an enduring gift to the University.

If you are age 72 and create a $10,000 gift annuity with cash, you will receive the following benefits:

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You may also fund a gift annuity with appreciated securities.

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Scanning the Brain to Understand Movement Disorders

by David Linzee

Using PET technology, Dr. Joel Perlmutter is examining the brain's interior to discover better treatments for diseases such as Parkinson's, essential tremor, and dystonia.
People who have Parkinson's disease and other movement disorders are troubled by stiffness, slowness, and trembling. But there's nothing wrong with their muscles. The problem must be sought deep in the brain, in the complex and still little-known system that transforms thought into action. Professor Joel S. Perlmutter and his team at the Movement Disorders Section at the School of Medicine are using powerful technology to watch the way this system works.

"Dr. Perlmutter's research harnesses established strengths in brain imaging at Washington University to make important contributions to understanding complex brain mechanisms," notes David B. Clifford, the Melba and Forest Seay Professor of Clinical Neuropharmacology in Neurology and head of the Department of Neurology. The primary tool is the PET (positron emission tomography) scan, which uses radioactive substances to track metabolic changes. Perlmutter uses PET to measure blood flow, "because the blood flow in different parts of the brain reflects how active the nerve cells are in that part of the brain," he explains.

Parkinson's disease afflicts more than a million people in North America. It affects speech, balance, and sexual function in addition to movement. Though it is generally thought of as a disease of old age, 5 percent of the patients Perlmutter's team sees developed it before age 40. For most patients, the disease steadily gets worse, and there is no cure. While people may inherit a vulnerability to the disease and toxins in their surroundings may trigger it, the cause of Parkinson's remains unknown.

What scientists do know is that when a person has Parkinson's, nerve cells in a part of the brain called the substantia nigra are dying. This causes a loss of the neurotransmitter dopamine, a key chemical messenger in the brain. With this vital communication system disrupted, people lose control of their movements. But why do the nerve cells die? Possibly because of a defect in the mitochondria, the powerhouse of the cell. Perlmutter says, "It may be a problem with how the cell uses oxygen to burn sugar."

Perlmutter studies many aspects of this energy production process. Last year, he was an investigator in a preliminary but encouraging study that found giving patients a naturally occurring compound called coenzyme Q10 may slow disease progression, possibly by boosting mitochondrial function. He will soon study a new drug developed by Laura Dugan, associate professor of neurology, using PET technology and an animal model of Parkinson's he has developed. The researchers hope the drug will not only slow the progress of the disease but actually reverse its effects. In another study, he is collaborating with William Powers, professor of neurology, to use PET scans to measure oxygen and sugar consumption in the brain, comparing how efficiently the mitochondria are producing energy in newly diagnosed patients with Parkinson's disease to determine whether this energy defect contributes to the development of Parkinsonism.

Perlmutter's father, who was diagnosed with Parkinson's a few years ago, took part in one study. Perlmutter says, "If we proved that this energy problem exists, it would suggest a whole new avenue of treatment. It is my hope that my dad will benefit from it." The knowledge that Parkinson's runs in his own family gives urgency to Perlmutter's work. "My dad has Parkinson's," he says. "His only brother had Parkinson's. So I better well cure this before I get it."

While the search for a cure goes on, Perlmutter seeks to improve existing treatments that give Parkinson's patients some relief from their symptoms. Again, the PET scan is an important tool. Levodopa (L-dopa), which the body converts to dopamine, is one drug that has long been in use. Dopamine, a chemical messenger that allows nerve cells to communicate with each other, is produced in the substantia nigra. As cells there die, dopamine is lost. Replacing the dopamine makes patients better able to move and function. Unfortunately, as the patient uses L-dopa, subsequent doses wear off more and more quickly, so dosages are increased. Many patients then begin to have wild, uncontrollable movements called dyskinesia, which can twist their entire bodies. "If we reduced the dose enough to..."
make the dyskinesia go away, the patient may get no benefit from the drug," Perlmutter explains.

To see what happens in the brain in response to the drug, Perlmutter's team, including Tamara Hershey, instructor in psychiatry, took PET scans of patients at different stages of the disease, gave them L-dopa, and then took another scan. They discovered that the brain responded differently in patients who had developed dyskinesia. Different signaling pathways were being activated. "This suggests that L-dopa may be working in a completely different way in this part of the brain than we thought," he says. "So if we understand that, we hope we'll be able to design drugs that work better and do not cause dyskinesia."

**Deep brain stimulation reduces symptoms**

A newer treatment for Parkinson's is deep brain stimulation. Stimulators, comparable to the pacemakers used for heart patients, are placed in the brain. "Some people with Parkinson's get markedly better," Perlmutter says. "They may, on average, reduce their medicine by almost two-thirds. Some are able to do without drugs. We have people who could hardly walk and now they're playing golf."

Dramatic as the results have been, the researchers did not know how deep brain stimulation worked. Many thought it reduced involuntary movements by blocking the flow of signals along the axons. Perlmutter had a different idea, based on the study of another movement disorder called essential tremor (ET). Placing a patient with ET in the PET scanner, his team measured blood flow in different parts of the brain with the stimulator turned off, then on. They found that the stimulator increased activity along signaling pathways. "This was the first evidence that stimulators really are driving axons, not blocking," he notes.

Perlmutter wanted to try a similar experiment with Parkinson's patients but faced a difficulty: When essential tremor patients' hands are at rest as they lie in the PET scanner, they do not shake. Parkinson's patients, however, may tremble at any time. These movements cause feedback in the brain, clouding the researchers' picture. Perlmutter's team had to watch carefully for tremors and discard half the scans they took. But enough remained to show that the stimulators affected brain activity in Parkinson's much as they did in ET.

"Under both conditions, we see that directly connecting areas have increased blood flow," Perlmutter says. "This may be important work in showing us where to place stimulators and how to adjust their settings to drive axons most effectively, maximizing the benefit and minimizing side effects."

Those in Perlmutter's Movement Disorders Section, with colleagues Josh Dowling, assistant professor of neurological surgery, and Keith Rich, associate professor of neurological surgery, run the leading center in North America for deep brain stimulation treatment. It has been certified as a Huntington's Disease Center of Excellence and as an Advanced Center for Parkinson's Disease Research. Staff members, who include seven physicians, residents, nurses, occupational therapists, and social workers, care for some 6,000 patients, of whom more than 1,900 have Parkinson's and another 1,200 have dystonia.

Dystonia is a mysterious ailment that distorts posture and movement. The cause is unknown, and it was previously classified as a psychiatric condition. "But we've looked at what's going on in the brain using PET and proven fairly clearly that it's a dysfunction of dopamine-mediated pathways in the brain," Perlmutter says. To pass on a message, dopamine has to stick to a specific spot on the receiving cell. There are several kinds of these receptors; Perlmutter's group has done extensive work on one called D2 and found it lacking in dystonia patients. His group has developed an animal model to continue the research and is collaborating with Jonathan Mink, associate professor of neurology and pediatrics, at the University of Rochester.

**Becoming a leading researcher of movement disorders**

Perlmutter came to the University in 1980 as a resident in neurology. Working with patients who had movement disorders, he became fascinated by the subject. "People were troubled by these mysterious movements, and most neurologists were baffled. I felt this was an area where I could make a contribution."

Now a professor of neurology and neurological surgery, of radiology, and of anatomy and neurobiology, Perlmutter's achievements are widely recognized. "He is an extraordinarily gifted physician and scientist," says Dr. David Clifford. "He is also a leader in computer-based record-keeping. The system he developed for his section is now in use in several leading research hospitals." Rather than thumbing through charts, physicians can find out which medicines patients are taking and check on possible side effects with
While the search for a cure goes on, Dr. Perlmutter seeks to improve existing treatments that give Parkinson’s patients some relief from their symptoms. Again, the PET scan is an important tool.

the click of a mouse. The system saves money and speeds research. "And the writing is computer-generated, so there are no errors due to a pharmacist's inability to read the doctor's handwriting," Perlmutter notes with a smile.

"Joel is a research leader in the area of movement disorders," says William Peck, executive vice chancellor for medical affairs and dean of the School of Medicine. "Furthermore, he is a fine educator and wonderful citizen of our medical school. He cares for his patients with great expertise, compassion, and sensitivity."

Perlmutter believes in tailoring therapy to the individual patient. "We can make a big difference just by opening our eyes and paying attention and listening to the patient, because they'll tell us what's wrong with them," he says.

William M. Landau, professor of neurology and former department head, says, "He is doing terrific work, bringing together clinical practice, basic science, imaging technology, and new animal models. We still don't understand these disorders, but through researchers like Perlmutter we are beginning to."

David Linzee is a free-lance writer based in St. Louis.
What am I going to do after I graduate?" is a question asked by nearly every college senior. Typical responses include finding gainful employment, attending graduate school, traveling abroad, or taking part in public service. For Washington University students who fall into the last category, several have become part of a growing movement to make a difference in public education in the United States. They have joined Teach for America (TFA). Founded in 1990 by Princeton graduate Wendy Kopp—a result of her senior thesis—Teach for America recruits bright, enthusiastic college graduates of all majors to teach for two years at some of the most underserved elementary and secondary schools in the country. Serving 18 regions (and growing), the program sends teachers, "corps members," to schools in low-income areas, both urban and rural. From New York to San Francisco, from Chicago to St. Louis to southern Louisiana, some 2,500-plus corps members work to raise expectations and to raise the performance of their students.

According to Eric Scroggins, A.B. '01, a key message emanating from Teach for America is that "given the opportunity,
which means the resources and the structure, children in low-income communities can succeed. These children can do it—and they deserve the opportunity!” Scroggins, a social thought and analysis major and a pre-med student, teaches eighth-grade Earth science at IS 125, a middle school in the South Bronx. He works hard to teach his students principles of igneous rock formation—and to help them get into better high schools.

“In the high school where my students are assigned, only 26 percent of the kids graduate in four years,” says Scroggins. “In my first year of teaching, I didn’t realize this; I didn’t know students had to apply to get into other public high schools. This year, I have been very involved in the high-school selection process; I think that is integral to my students’ future.”

In the IS 125 class of 2002, only seven students applied to Bronx Science, Stuyvesant, and Brooklyn Tech—three top New York City public high schools. This past fall, Scroggins conducted a review program, and 156 of his 175 students took the entrance exam for these schools. They are waiting to hear if they have been admitted.

“If we have even 10 kids accepted into these special, intense schools, that is a 1,000 percent increase over the past 25 years,” he says. “And it opens the door for future students.”

Eric Scroggins (center), A.B. '01, teaches eighth-grade Earth science at IS 125 in the South Bronx. For him, Teach for America is about giving children from low-income communities the opportunity—the resources and structure—to succeed in school.
There is an incredibly wide range of ability levels within one classroom," says Mary Garton. "A lot of our teachers conclude: 'If I am going to make this happen, I will have to personalize instruction. ...'"

On a Mission

The achievement gap between students of high- and middle-income communities and those of low-income communities is wide. According to U.S. Secretary of Education Rod Paige, "Nearly 70 percent of inner-city and rural fourth-graders cannot read at even a basic level. Imagine that: In the greatest, wealthiest nation the world has ever known, nearly 7 out of 10 fourth-graders in big cities and rural areas cannot read. It is our greatest failure as a nation. It is our failure as a people, and we must do something about it."

Mary Garton, A.B. '91, is working hard to do just that. Graduating with a degree in French language and literature, Garton joined Teach for America in 1991 and taught French in a rural school in southern Louisiana. Realizing the great need for teachers across all subjects, Garton became a full-time middle-school teacher in her second year. After her two-year commitment was over, she continued teaching for another 7½ years, until Teach for America asked her to manage its Summer Training Institute.

"I was persuaded that by preparing new teachers I could impact a thousand classrooms and not just one," says Garton. After managing the Summer Institute in Houston for two years, she is back in Louisiana as the executive director of Teach for America in the region. "I realized that my real commitment was to the students of the greater New Orleans Public Schools," says Garton. "I now work with 130 teachers and staff throughout the region."

Making an Impact

To maximize its impact, Teach for America has a two-fold mission. In phase one, determined, idealistic college graduates go into schools with the greatest needs to help some 215,000 students. The corps members have a directive: to elevate each student's performance by 1½ years each academic year.

"There is an incredibly wide range of ability levels within one classroom," says Garton. "A lot of our teachers conclude: 'If I am going to make this happen, I will have to personalize instruction. I'll have to create extra learning opportunities for my students who are behind.'"

In the second phase, TFA alumni carry their teaching experiences with them to influence other segments of society. "We have physicians, bankers, lawyers, all working out in the community as advocates for education, but in different ways," says Garton. "While we embrace and encourage our folks who want to stay in education, we know it is going to take change—massive systemic change—in all sectors to really make a difference for education."

Growing a Movement

Many young people are stirred by the call to serve. For the 2002-2003 academic year, some 14,000 persons applied for 1,700 positions. Of the 87 applicants from Washington University, 18 were accepted.

Laura Nalley, recruitment director for the Midwest region, visits the University often as one of the five principal schools she targets. "We've found that so many of those who apply are very well-suited for our selection model," says Nalley. "We are looking for really amazing people, and many amazing people apply, but we are also looking for the person who has the drive to do something about the inequities in education."

[Washington University alumni have been a part of the program since its second year in 1991.] Rob Wild, A.B. '93 (dual degrees in biology and Afro- and African-American studies), was a 1993 corps member and taught science at a middle school in the Bronx. Now the associate director for residential life at the University, he also is an alumni recruiter for Teach for America. Wild says, "I meet with a lot of students, and I tell them: 'Teach for America is the hardest thing I've ever done. It is hard teaching anywhere, but Teach for America is particularly hard because you are going into an area without a lot of
Sharon Ganger (standing), A.B. '02, teaches communication arts at Bunche International Studies Middle School in North St. Louis. With a significant number of international students, Ganger says that some students need to be challenged and some are just trying to pick up the language. She tries to differentiate her instruction and projects depending on each student's needs.

resources, where the children face a lot of challenges that most of us do not face while growing up.”

Scroggins adds: “All children have problems, but our children are facing the intersection of multiple problems, such as racism, poverty, and xenophobia. I feel they have more than most to overcome in order to be successful in school. A lot of them are English-language learners, their parents are immigrants, and 98 percent of them are eligible for free or reduced-price lunch.”

Teach for America teachers get intensive training to work with these children. Directly after college graduation, corps members attend a five-week summer institute. The institute teaches the “how-to’s” of managing a classroom and creating lesson plans. The instruction draws on top education research from across the country for the basis of its curriculum and on the practices of teachers who have been successful in low-income schools. Throughout their tenures, corps members also get support from TFA programming personnel, their school principal, mentor teacher, and often other corps members in their same school.

Working Hard for Kids

Teach for America corps members are filling a need in districts with teacher shortages.

Sharon Ganger, A.B. '02, teaches communication arts (literature and reading) at Bunche International Studies Middle School in North St. Louis. With a significant population of international students, where English is often a second—and sometimes third—language, Ganger has to individualize her instruction to help the students improve reading comprehension. She is acutely aware of the importance of bringing her students up to acceptable levels.

“As early as eighth grade, I am already noticing that some students are so far behind,” says Ganger. “They need help getting to where they need to be in terms of what is acceptable for a person 13 years of age to know.”

Ganger, a social thought and analysis major, hopes one day to earn a law degree, to effect change regarding legal aspects of education. “Originally, I knew I wanted to study law,” she says, “but the more I hear about the political aspects of education, the more I want to deal with that process.”

Scroggins, whose future plans also include law school and work in the nonprofit sector, says: “I work hard for my kids because I know what is possible. I know the disparity in resources in my school, yet I know given the opportunity, my students can succeed. That juxtaposition is what really motivates me.”

And Garton continues to work for the best education for all children in her region. “I hadn’t been back to Washington U. in a long time, and I came back over the winter break,” she says. “As I was walking around campus, I kept thinking that I hope what I am doing in New Orleans is making opportunities like coming here a reality for more of our students.”

Maybe one day, her students and hundreds more like them can ask, “What am I going to do after I graduate from college?”

Teresa Napper is the editor of this magazine.
Since September 11, 2001, School of Law Professor Charles McManis has committed his academic career to bridging the gap between the industrialized and developing worlds in the complex, burgeoning area of intellectual property law—for the benefit of all.

by Betsy Rogers

Chuck McManis was at a conference in Manaus, Brazil, wrestling with vexing issues of bio-piracy, compensating indigenous peoples for traditional knowledge, and international enforcement of intellectual property law. A conversation with a Guyanian ambassador had left him pondering the inequities under which developing countries struggle to find their place in the global marketplace.

It was September 10, 2001. “I was presenting my paper on September 11,” he recalled later, “and thus witnessed the horrific events of that day from a somewhat different vantage point than most Americans.”

The experience was a turning point for Charles R. McManis, who is the inaugural Thomas and Karole Green Professor of Law at the School of Law. “By the time I finally returned home,” he said in his chair installation lecture September 26, 2002, “I had made a firm resolve to commit my remaining academic career to doing whatever I could to bridge the terrible gap that divides and poisons relations between the industrialized and developing worlds.”

Though an intellectual property attorney might seem to occupy an improbable position for bringing the First and Third worlds together, McManis is working hard to prove that it can be done, nowhere so visibly as in the issue of biodiversity and traditional knowledge.
McManis' vision is of collaboration rather than conflict. "He's a scholar with a heart," says law school Dean Joel Seligman, the Ethan A. H. Shepley University Professor. "He is focusing on ways in which international property laws can best protect the property interests of indigenous peoples in areas like the Amazon River basin."

It is not a new issue. The very city where McManis attended the September 2001 conference was the victim of "gene piracy" in the 19th century. "Manaus was the rubber capital of Brazil," McManis explains, "and Brazil was the rubber baron of the world. It had a natural monopoly on rubber trees—until researchers from the Royal Botanic Gardens at Kew spirited plants out of Brazil." The Kew scientists turned the trees over to the British government, which promptly established rubber plantations in what is now Malaysia, thus breaking the Brazilian monopoly.

McManis envisions a much more mutually beneficial approach and takes heart from instances where it is already in place. Perhaps his favorite example concerns Washington University biologist Walter H. Lewis and ethnobotanist Memory P. Elvin-Lewis. This husband-and-wife team have searched the Peruvian rain forest for years for an antimalarial remedy.

Working with a National Institutes of Health grant, the Lewises negotiated a set of agreements with two Peruvian research institutions and Peru's Aguaruna...
THE INDUSTRIALIZED WORLD throws around the word ‘piracy,’ accusing the developing world of harboring and indeed encouraging intellectual property piracy,” McManis observes, “but from the developing country’s point of view, you hear the allegation of neo-colonialism, an attempt to keep the developing countries under the thumb of the industrialized world.”

Convinced that intellectual property (IP) law is inescapably international, McManis has himself acquired an international reputation in the field. "He's known all over the world, in Europe and particularly in Asia," says Dorsey D. Ellis, Jr., the William R. Orthwein Distinguished Professor of Law and dean of the School from 1987–1998. "He was among the first to see that intellectual property was a subject that could not be contained within the boundaries of American law."

McManis won a Fulbright Fellowship for research in Korea and has returned there frequently. He has been an exchange professor in China, a visiting lecturer in Japan, and a workshop speaker in Taiwan. He has consulted with the World Intellectual Property Organization in India. All these experiences have helped him understand other nations' views about intellectual property.

"The industrialized world throws around the word ‘piracy,’ accusing the developing world of harboring and indeed encouraging intellectual property piracy,” McManis observes, “but from the developing country’s point of view, you hear the allegation of neo-colonialism, an attempt to keep the developing countries under the thumb of the industrialized world.”
The international IP issues are just one constellation in a rapidly expanding cosmos that observers call the intellectual property boom. Fueled by digital technology and biotechnology, intellectual property law has gone from an arcane specialty to a vast growth industry.

American IP law is rooted in the Constitution, which says, “The Congress shall have Power ... To promote the Progress of Science and the useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” From this simple statement has arisen the body of law that includes patents, trademarks, and copyrights.

McManis believes that the public purpose of promoting science and the useful arts is losing out in today’s climate, where powerful business interests press new kinds of claims, some valid and some spurious, and effectively erode this public objective.

In other instances business is evading IP provisions altogether. McManis has studied and written extensively about the so-called “shrink-wrapped” license included in typical software packages and its relationship to copyright law. The consumer buys software, takes it home, breaks into the plastic wrapping, and discovers that having done so, he or she is now a party to a highly restrictive contract, which can be nullified only by returning the software to the source.

McManis says these mass licenses limit the way students, teachers, educational institutions, libraries, and others can use the materials—though the prohibited uses are often permissible under federal copyright law. Further, proposed changes to the nation’s Uniform Commercial Code would enshrine these licenses, render copyright law irrelevant to license-protected property, and cast aside centuries of precedent about users’ privileges for purposes such as criticism, comment, reporting, teaching, and scholarship.

As an active member of the American Law Institute, McManis has been vocal in the ongoing debate about these changes and has helped block their adoption. “One might title the story ‘Chuck the Giant Killer,’” Ellis says of McManis’ role in the debate, which pits him against the publishing and entertainment industries.

With the intellectual property boom has come a sharp new focus at the nation’s law schools, and McManis has propelled the specialty to prominence at Washington University.

“Chuck is an army unto himself,” Seligman says. “He took the lead in creating an extraordinary adjunct-run program in intellectual property. He very emphatically wanted it to go further. He wanted more faculty hired in the intellectual property area and ultimately the creation of a broader program.”

Among the results was the 2001 addition of an LLM degree in intellectual property, one of perhaps a half dozen in the nation.

McManis’ energy and drive have struck a responsive chord among students, who also value his intellect, humor, and sincerity. “He is an exceptional teacher,” says Tanuja V. Garde, J.D. ’98, who heads the U.S. Department at the Max Planck Institute for Intellectual Property, Competition, and Taxation Law in Munich, Germany. “He’s the one who introduced me to intellectual property law and one of the primary reasons I went into it. He’s a very committed professor,” she says.

Law students named him Teacher of the Year for 2001, and the same year the Law Alumni Association honored him with the Alumni Distinguished Teaching Award.


“He is a thoughtful scholar in international intellectual property and in a vast variety of new and increasingly complex problems concerning domestic intellectual property law,” Seligman observes. “I sometimes worry that he never sleeps, but I marvel at his absolutely boundless enthusiasm.”

Betsy Rogers is a free-lance writer based in Belleville, Illinois.
In her biomedical engineering laboratory Assistant Professor Shelly Sakiyama-Elbert has created a viscous gel that delivers protein cues for regenerating nerves damaged by disease or trauma.
A large part of discovery is coming up with the right questions," says Shelly Sakiyama-Elbert. As the Joseph and Florence Farrow Assistant Professor of Biomedical Engineering, Sakiyama-Elbert is in the business of asking questions. The answers she's found provide people with hope for regrowing severed nerves, healing spinal cord injuries, and slowing the progress of degenerative diseases.

Currently when a nerve is damaged, new nerve tissue is grafted onto the surviving old tissue. Although the grafted nerve cells are dead (even when taken from a living donor), they carry proteins that the living tissue can detect—and follow through the gap where the damaged cells used to be. Essentially, the graft becomes a scaffold upon which new cells can grow. Grafts have problems of their own, though. Graft cells either come from within the patient, in which case their excision creates a new injury elsewhere, or they come from cadavers and run the risk of rejection.

Sakiyama-Elbert's lab tackles these problems by using an artificial nerve guide tube instead of a graft, filled with a sticky gel that bears protein cues of its own. The guide tube is not unusual, but the gel within it is. To engineer that gel, Sakiyama-Elbert asked questions about existing nerve behavior. She saw that nerve cells already send fibrin bridges across guide tubes at the start of regeneration. This fibrin, which is also the protein component of blood clots, takes about a week to form. "We put fibrin into the gel from day one," Sakiyama-Elbert explains. "That cuts a week off our regeneration time from the beginning."

She puts growth factor proteins into the gel as well. These proteins normally act and disappear within minutes, but since nerves require weeks and months to grow, Sakiyama-Elbert needed to slow the process down.

"So we made the gel very sticky," she says. Because of this stickiness, only a small amount of the protein can act at a given time; the rest remains bound to the gel. "It's as if you tried to walk across the room, but I'd put down a bunch of mousetrap sticky boards," Sakiyama-Elbert says. "If there weren't very many boards, you could weave around them and get across the room. But if I put down a continuous sheet, eventually you'd start stepping on them, and it would take you much longer to get your foot off the floor for each step. Therefore, it would take you a lot longer to cross the room."

Assistant Professor Shelly Sakiyama-Elbert (right) works with Sara Taylor, a graduate student in the Medical Scientist Training Program. Taylor is the first student in the M.D./Ph.D. program to conduct her doctoral research in biomedical engineering.
Assistant Professor Shelly Sakiyama-Elbert also works with colleagues at the medical school. She says, "The opportunity to work with clinicians, to find out what they really need, is very helpful when developing technologies that are so interdisciplinary."

Initial studies of this affinity-based delivery system, conducted on rats, have shown promising results; injured sciatic nerves treated with nerve guide tubes regenerated at the same rate as sciatic nerves receiving nerve grafts.

**Making Nerve Tissue Functional**

The next question, Sakiyama-Elbert says, is whether the new nerve tissue is functional. While anatomic regeneration takes only about six weeks, functional regeneration takes three to six months, depending on the injury. Sakiyama-Elbert is currently designing follow-up studies.

"The prospect of being able to regenerate nerves damaged by disease or trauma is tremendously exciting," says Frank Yin, chair of the Department of Biomedical Engineering and the Stephen F. and Camilla T. Brauer Professor of Biomedical Engineering. "And [Sakiyama-Elbert] is indefatigable, undaunted by even the most difficult challenges."

She rarely faces these challenges alone; in addition to the graduate students, undergraduates, postdocs, and technicians in her lab, Sakiyama-Elbert also works with colleagues at the School of Medicine. "One of the things I enjoy most about the University is that people are very open to collaboration," she says. In fact, this collaborative spirit helped encourage her to come to Washington University, almost three years ago.

In her work with nerve guide tubes, Sakiyama-Elbert collaborates with members of the laboratory of Susan Mackinnon, who is both head of the School of Medicine's Division of Plastic and Reconstructive Surgery and the Sydney M. Shoenberg, Jr. and Robert H. Shoenberg Professor of Plastic and Reconstructive Surgery. "Professor Sakiyama-Elbert has been a tremendous role model for the University's medical students and research fellows," Mackinnon says, adding that School of Medicine surgeons trained in nerve surgery are working to translate Sakiyama-Elbert's work into clinical practice. Sakiyama-Elbert appreciates Mackinnon's clinical expertise in turn. "The opportunity to work with clinicians, to find out what they really need, is very helpful when developing technologies that are so interdisciplinary," she says.

Sakiyama-Elbert also collaborates with John McDonald, assistant professor of neurology and neurological surgery, and head of the School of Medicine's Spinal Cord Injury Program. McDonald says he enjoys her "passion and high motivation," as well as her "no-barriers approach to science." Their work together does not require a nerve guide tube; instead, the researchers make a small hole in the membrane around a damaged section of spinal cord, letting that membrane act as a natural conduit for the gel.

"Spinal cord regeneration is very challenging," Sakiyama-Elbert says, because scars tend to form around spinal cord injuries, creating a barrier to new nerve growth. The fibrin in Sakiyama-Elbert's gel has helped reduce this scarring, however, and preliminary rat studies again look promising. The work has potentially promising applications for accident victims, as well as for victims of degenerative disorders such as Parkinson's disease—though the road to clinical applications there is likely to be longer.

**Helping People Recover**

As an undergraduate chemical engineering major at Massachusetts Institute of Technology, Sakiyama-Elbert once considered entering medical school and becoming a clinician herself. She ultimately decided to combine her interests in biology and engineering by focusing on biomedical engineering instead; she went on to pursue graduate work first at the California Institute of Technology, then at the Swiss Federal Institute of Technology.

Now at Washington University, she teaches courses in Tissue Engineering and the Engineering Aspects of Biotechnology. Yin says her students consider her tough but fair in the classroom, and supportive of them in the laboratory.

In both settings she encourages her students to ask questions of their own. "One of the things they learn is to be very critical of the literature," she says. "You need to think: 'What experiments would I have done? How would I have analyzed these data?'"

Sakiyama-Elbert continues to enjoy asking her own questions and designing the experiments to answer them. "The potential for coming up with a new idea, a new way to approach a problem, is very exciting," she says.

"And so is thinking about the ways in which work you're doing might one day be able to help people."
Saying "Yes" to People in Need

From a tiny office 25 years ago, alumna Bernie Wong has developed the Chinese American Service League of Chicago into the largest bilingual social service agency in the Midwest.

BY JUDY H. WATTS
Never tell Bernie Wong something can't be done. You'll be resoundingly mistaken. If human need exists and this soft-spoken social worker is determined to help, she will let nothing deter her from not only improving a situation but transforming it.

President of the Chinese American Service League (CASL), Wong has led the organization for 24 years in Chicago's Chinatown, a vivid 10-block area south of the downtown Loop where pagoda roofs notch the sky and red and green paint summon good luck and prosperity. But as the Midwest's largest bilingual social service agency serving primarily Chinese individuals, CASL now provides mostly free services to fully 14,000 clients a year—many of them in multiple programs—who live in Chinatown, throughout the metropolitan area, and beyond. The agency has a budget of $5.8 million, a bilingual staff of 190, and many dozens of programs in four departments—family and community, child education and development, employment and training, and elderly services.

“We serve anybody, of any race, who comes through the door,” says Wong. If a person speaks neither English nor Chinese, the staff calls an organization where the appropriate language is used. Recent immigrants from China are one of the agency's most urgent concerns: They usually speak limited English and tend to be low income. “But CASL sees the people out of that level, and we watch them move up.”

When someone seeking employment or other assistance first walks into CASL, the family-oriented staff tries to determine whether the client has additional needs. Whatever the requirements—counseling for depression, day care for young children, or academic assistance for teenagers—social workers can introduce the client to someone at CASL who will help. The agency's programs even include community initiatives and coordinating neighborhood development for the larger Chinese community. Such remarkably complete services at CASL represent Wong's automatic responses to necessity. When she founded CASL in 1978, professional programs for Chinese Americans were sparse. Since then, Wong has listened closely to people in need—and she keeps saying yes.

The Chinese American Service League sprang up in the late '70s, when a group of 10 friends that included Bernie Wong, supported by her husband, Albert, spent Sundays in a tiny community room helping Chinatown's seniors obtain Social Security information for tax rebates. Within weeks, checks began arriving in the mail.

But when the extent of the community's needs became clear, Wong sought help. Using the outreach ability that is one of her strengths, she made presentations to the United Charities of Chicago (now Metropolitan Family Services) requesting assistance. The result: For CASL's critical first year, the agency donated office space, a shared secretary, basic equipment, and all supplies. (“My hope is that all large agencies will help the fledglings, especially ethnic organizations that have an abundance of vision but few resources,” Wong says.)

Because her friends had full-time commitments, Wong single-handedly set up her tiny apartment-sized office and recruited a skeleton staff. Almost immediately, she realized there wasn't enough space. When Chicago anchorwoman Linda Yu stopped by to visit, for example, she could hardly get up the stairs because people were standing on every step, waiting to get in. (Today, Yu chairs CASL's advisory board.)

A month or two later, Wong heard about the benefits of being a United Way agency. Knowledgeable sources informed her, however, that she shouldn't even think about applying for membership until CASL had developed a five-year track record. “I said I couldn't wait that long!” Wong says. “So I went to United Way and asked to see the person in charge of

The Vernon Sandacz Children and Youth Center (left) and the Adult Day Service Center (top) are two of the Chinese American Service League's five facilities, which serve 14,000 clients annually.
membership applications. We were still working on our systems and manuals, but our social service points helped us get in.” Wong later became United Way of Chicago’s first Asian-American board member.

Six years ago, on the eve of a $9.15 million capital campaign, Wong turned to HUD (U.S. Department of Housing and Urban Development), again in response to her clients’ needs. “When seniors told us they had no housing, we listened.” Wong presented the idea to CASL’s board members (“who all said ‘fine’”) and prepared to apply for funds for a new building. “But I said, ‘I can’t do all this and start a capital campaign at the same time!’ Everybody told me, ‘Don’t worry, it always takes three tries with HUD.’ But we got the funding on our first try!”

Now CASL has a “wonderful building” for seniors, with seven floors; 91 units; a full-time, on-site social worker; a thoughtful set of services; and more than 130 “very contented seniors.” At last count, 466 names are on the waiting list.

(Wong did simultaneously launch CASL’s multi-million-dollar campaign, which has been very successful. Although $360,000 still must be raised, CASL will move in spring 2004 to a three-story, 36,000-square-foot facility, where all social services will be available under one roof.)

How ever does Bernie Wong do it? Her mother’s mentoring example “as a social worker of her time” has counted for a lot, Wong says. Born in Hong Kong at the end of World War II, Wong went with her mother on weekends to the crowded public hospital, where “my mom walked up to absolute strangers lying in hallways, and cleaned their mucus and cared for them.” Wong has inherited an equally compelling drive to serve others.

Earning her M.S.W. at the George Warren Brown School of Social Work (GWB) in 1968 was very important, as well, says Wong. GWB provided the young scholarship student with the wide-ranging professional training she needed—and a warm environment in which classmates of different ages and races made a habit of helping one another.

Connections, says Wong, are critical. Over the years, which have brought her bouquets of honors and awards, she has made a point of meeting leaders throughout the city and state, and she has served on more than three dozen prestigious councils, associations, and committees at all levels. Of these, 12 were presidencies or chairships; six were board memberships.

Above all, Wong’s indomitable spirit pushes the remarkable to happen. In a scenario repeated in kind throughout CASL’s history, Wong decided one day that since written requests for a larger library in Chinatown had been futile, she would simply pay a call on the late Harold Washington, then mayor of Chicago, to ask him for a library that CASL and the Chinatown community could use. She was quickly appointed by the late mayor as the first Asian to the Public Library Board. (A spacious new library followed.)

“To convince people to pitch in, you have to do your job very well and have excellent services,” Wong says. “But I always like to have prospective sponsors and donors visit CASL to watch the programs in action. When they see how the people are being helped, I don’t have to say a word.”

Judy H. Watts is a freelance writer based in Santa Barbara, California, and a former editor of this magazine.
Sherman James, Ph.D., '73, is the John P. Kirscht Collegiate Professor of Public Health in the School of Public Health at the University of Michigan. He is also the founding director of the School's Center for Research on Ethnicity, Culture, and Health. His work on "John Henryism" led to his election to the National Academy of Sciences in 2000.

Sherman James' hypothesis on "John Henryism" states that the psychological stress resulting from persistent social and economic oppression contributes to health problems in African Americans.
Listen to my story;  
'Tis a story true;  
'Bout a might man, —John Henry was his name,  
An' John Henry was a steel-driver too—  
Lawd, — Lawd, —  
John Henry was a steel-driver too.

(A construction crew version of the ballad—one of many—about the legend of John Henry, the Steel-Driving Man)

Imagine the small town of Hartsville, South Carolina, in the late 1950s. Population: approximately 5,000. There is a black side of town and a white. That's just the way it was in many Southern towns. Consider the close-knit, working-class black side of town. There is the young Sherman James. His mother finished high school, his father the eighth grade. He loves learning under the tutelage of several strict nuns at the Catholic school he attends. He has almost no unsupervised contact with whites—and that's just the way his parents and the black community want it. He will have no white friends until he is in his 20s. He is immersed in small-town, Southern black culture. Certainly, he has heard about the legend of John Henry, the black railroad worker who outperformed a steam-driven drill.

Starting in the seventh grade, he gets a job working at the local pharmacy. Summers, he works in the morning. As he goes about his chores, he listens in on the conversation of the pharmacist, the dentist, and the physician—all black men of local distinction.

"These three black men had quite a lot of life experience. They were well-educated and had traveled quite a bit. They came together every day over coffee, and they debated just about everything under the sun. It was very educational listening to these men talk about life, science, politics," James says.

During the five years he works at the pharmacy, the men help him see life beyond Hartsville. He wants to be first in his family to earn a college degree, perhaps earn a professional degree, and definitely something in the field of health.

An African proverb says it takes a village to raise a child. In Sherman James' case, an important part of his village was the local black-owned pharmacy.

John Henry had a hammah;  
Weighed nigh fo'ty pou'n';  
Eb'ry time John made a strike  
He seen his steel go 'bout two inches down,—  
Lawd, — Lawd, —  
He seen his steel go 'bout two inches down.

In 1960, at the age of 16, James entered Talladega College, a historically black liberal arts college located 50 miles from Birmingham, Alabama. In 1964, he graduated with a bachelor's degree in psychology. He wasn't sure exactly what he wanted to do next, so he enlisted in the U.S. Air Force and was commissioned as a second lieutenant in February 1965.

James stayed stateside during the Vietnam War and made friends with his fellow white officers, one of whom had attended Washington University and spoke highly of the institution. Upon being discharged from the Air Force in 1969, James entered the doctoral program in clinical psychology at Washington University.

Though he began his studies in clinical psychology, he was drawn increasingly to social psychology because of that discipline's stronger emphasis on American race relations. When he read for personal enjoyment, he always chose books about American history and the African-American experience.

"That became my passion," James says. "Growing up in the segregated South, I wanted to understand how American race relations came to be what they were and what the possibilities were for improvement or reconciliation."

In December 1973, James received a Ph.D. in social psychology.

John Henry kissed his hammah;  
White Man turned on steam;  
Li'l Bill held John Henry's trusty steel,—  
'Twas th' biggest race th' worl' had ever seen,—  
Lawd, — Lawd, —  
Th' biggest race th' worl' had ever seen.

In January 1973, James was contacted by a search committee in the Department of Epidemiology at the University of North Carolina at Chapel Hill (UNC). After a two-day visit and interview process, James was offered an assistant professorship; he decided to accept it for two reasons.

"The first was the inspirational manner in which John Cassell (then chairman of epidemiology at UNC) talked about the field of epidemiology, its interdisciplinary character and its historic role in helping control epidemics and thus improve the life chances for people all over the world," James said in the spring 2002 issue of Psychoniche, the Washington University psychology department annual newsletter.

Second, James was ready to return to the South after almost a decade away. The position also provided the opportunity for James, his wife, and two sons to be near family.
"I think the legend of John Henry is a metaphor of the African-American experience," says Sherman James. "It tells of the struggle of black Americans to be a part of mainstream America. It is a struggle that has played out against great odds ...."

James' ongoing research seeks to demonstrate how John Henryism, defined as "persistent high-effort coping with difficult and recurring social and economic stressors," contributes to the increased risk of hypertension, and related health problems, in African Americans. Over a 20-year period, he has conducted three large, independent tests of the John Henryism Hypothesis, with each indicating some support for the hypothesis. More studies are needed, James says, especially in large urban areas of the country where many blacks now live. The concept of John Henryism has spawned dozens of other studies, including studies in Europe and sub-Saharan Africa. The John Henryism Scale, which James developed, has been translated into eight languages.

In 1989, after 16 years at UNC, James accepted a professorship at the University of Michigan. He is currently the John P. Kirscht Collegiate Professor of Public Health with joint professorships in the Department of Epidemiology and in the Department of Health Behavior and Health Education. In 1998, he became the founding director of the Center for Research on Ethnicity, Culture, and Health—a forum for basic and applied public health research on the intersections of race, ethnicity, culture, socioeconomic status, and health.

"My career can be characterized as a constant unfolding. I started out being interested primarily in race relations. That unfolded into race relations and health, and the latter has given rise to a more complex set of concerns about social class, race, ethnicity, culture, and health," he says.

John Henry, O, John Henry!
Sing it if yo' can,—
High an' low an' ev'ry where yo' go,—
He died with his hammah in his han',—
Lawn, — Lawn, —
He died with his hammah in his han'.

During his years at UNC, James returned many times to his hometown, Hartsville. The pharmacist, dentist, and physician who were such strong influences on his career were still alive then, and James visited them frequently. He told them of his research and interests. "They were enormously proud of what I had done," James says.

C.B. Adams is a St. Louis-based writer.
GETTING MORE from His Business

by Gretchen Lee

Alumnus Alan Bender turned a little start-up into a giant in the telecommunications industry, T-Mobile.

To talk with Alan Bender about his life’s work is to hear the story of a tiny telecommunications company that could—growing from a fledgling enterprise in the early 1990s to a global powerhouse at the start of the new century.

Bender first helped small start-up General Cellular become the regional bellwether Western Wireless, which in turn spun off the successful PCS underdog VoiceStream. VoiceStream eventually grew to become the worldwide heavy hitter T-Mobile USA, Inc., after it was sold to the German telecommunications giant Deutsche Telecom in 2001 in a record-breaking deal. But before you can hear the story of Bender as the executive vice president of T-Mobile, you have to hear about some pretty humble beginnings.
In the 1980s, the U.S. government announced it would use a lottery to give away spectrum rights—the rights that would eventually spawn a nationwide network for cellular telephones. "You too can own a piece of the American spectrum!" boomed an announcer on late-night TV commercials. Investors could get in on the ground floor with just $200 to $300 by partnering with other applicants from around the country. With little market for cellular at the time, though, these lofty promises seemed more like "pie-in-the-sky" than the next big thing.

By the early 1990s, Bender, who studied political science at Washington University in the Class of 1976 before earning a law degree in 1979 from Duke University, had worked at a number of prestigious law firms in New York City and Washington, D.C. He'd recently moved with his wife, Joyce, and daughter, Mallory (now 16), to San Francisco to take another legal position. But, he also had begun to feel dissatisfied. Working with business clients, he notes, "you get to the deal after it's been hatched. Often, you get to the deal after it's gone awry."

A brief stint in the mid-1980s as in-house counsel at a securities firm gave him a taste of what it's like to work in business rather than for business. So when a colleague introduced him to a group of people trying to start up a wireless cell telephone company, he was ready to take the chance.

Working from a small office in San Francisco's financial district, Bender and his four partners threw themselves into building General Cellular by piecing together networks and buying out mom-and-pop license holders. They worked with little capital in a cash-intensive business. By 1991 General Cellular was not in good shape, and very nearly had to close its doors. "You have to acquire licenses, assemble systems, build the switches, construct the towers, and you have to have a sales force," he says.

Bender recalls the difficult time: "The war was breaking out in the Persian Gulf. No banks were lending money to companies without positive cash flow. The junk bond market had collapsed. Milken was going to jail. The savings and loan crisis had come. The real estate market had collapsed."

"And yet these valuable licenses existed—and you had to have a license to be in business," he says. "We had assets, we had a business plan that was going to work, but we didn't have the capital."

Bender, with a background in corporate finance, arranged an innovative deal by which an investment firm would purchase the company's debt, exchange it for equity, and become shareholders through a Chapter 11 reorganization process. Such deals are commonplace today, but, at the time, it took a lot of talking to convince everyone of the plan's viability.

"There were many days when I believed that it wasn't going to happen," Bender says. "I really do believe that when you have nothing to lose, you become the best, toughest, brightest negotiator you can be—because your back's against the wall."

With the reorganization came a new chairman of the board—John Stanton, who also ran a cellular company in the Seattle area. Because each company controlled different regional markets, it soon became clear that the two should merge. General Cellular became Western Wireless in 1994, and Bender left the San Francisco Bay area to move with his family, which by that time included a son, Adam (now 13), to the company's new headquarters in Seattle.

In 1994, the Federal Communications Commission announced it would auction off more spectrum rights, and Western Wireless took the challenge, raising $150 million from its shareholders to purchase six licenses for PCS (Personal Communications Service), which at the time was an untried, undeveloped technology.

Bender admits now that his wife was skeptical at times. "I was getting a lot of quizzical looks at home," he recalls. "Yet I put Joyce's IRA and my IRA totally into this, as well as other substantial savings."

Though consumer behavior had begun to shift by 1994—more people than ever were using mobile phones as increased competition brought lower rates—it wasn't yet clear whether PCS with its intense infrastructure requirements would ever win out over cellular.
"I really do believe that when you have nothing to lose, you become the best, toughest, brightest negotiator you can be—because your back's against the wall."

Not only that, but there were three PCS protocols available (the protocol defines the steps taken during call setups). Western Wireless went with the GSM protocol, even though CDMA and TDMA were emerging as more popular protocols in most major U.S. cities. But while GSM was immediately available for development in Western Wireless' target markets of moderate-sized cities, other protocols would not be ready for an uncertain period of time.

"The big companies like Verizon and Sprint could wait," Bender says. "But, being the small dogs, we had to get out there first. We had to build a name, grab market share in order to compete."

The company's primary investor, Hong Kong-based Hutchison Whampoa, supported the decision because GSM had already emerged as the standard in Europe and Asia. "They kept saying, 'People are going to want to go from Paris to New York to Hong Kong without having to change their phones.' You can do it on GSM, but you can't do it on CDMA and you can't do it on TDMA."

In May 1999, Western Wireless spun off its PCS division as VoiceStream. Hindsight is 20/20, but VoiceStream managed to get a glimpse early on that it was headed for something big when in October 1999—just five months after going public—the company joined the Nasdaq 100. (Bender got the honor of introducing the company on the Nasdaq floor.)

"All of a sudden, you owned about $600 for every little share of $10 General Cellular stock that you owned when the company came out of bankruptcy in 1991," recalls Bender. "So you've got a lot of smiling faces." (With some of the return on his personal investment, Bender was able to fulfill a fantasy—he became a part owner of the Seattle Supersonics basketball team.)

Soon afterward, the company caught the attention of Deutsche Telecom, which purchased the company in 2001 in a record-busting $52 billion deal. Now known as T-Mobile, the company has 19,000 employees and 10 million customers in the United States (and 72 million customers worldwide), making it one of the top three global wireless carriers. (Spokesperson Catherine Zeta-Jones exhorts customers to "Get More from Life" in television and print ads.)

"What was attractive for us is that Deutsche Telecom had the capital, they had resources to deploy," Bender says, "and we needed an organization that could build the business even further."

Now that the little company he helped found has all but grown up, Bender is looking forward to spending more time with his family and becoming more involved in community development—getting more from life overall!

Gretchen Lee, A.B. '86, is a free-lance writer based in San Francisco.
Fifty years ago, when Shi Hui Huang came from Taiwan to St. Louis to further his medical education, he had to pull out a map to find the city. In 1953, few Asians came to the United States to study, and Washington University in St. Louis was not exactly a household name in any part of the world.

Forty years later, Dr. Huang became Washington University's first international trustee and helped launch the International Advisory Council for Asia. Today, 10 percent of students at the University come from abroad, two-thirds of these from East Asia, and alumni clubs are active from Taiwan to Hong Kong to Singapore. As Chancellor Emeritus William Danforth wrote in 1998, when Huang became a trustee emeritus, “Your joining the board was a very key event in the history of our institution. ... Washington University is better today because of you.”

Huang's contributions to the University are only the tip of the iceberg in a lifetime of extraordinary leadership. Very few people become eminent in a single profession; Shi Hui Huang has achieved international success in two. After training at the Washington University School of Medicine, Huang practiced as a highly regarded neurosurgeon for 25 years. In 1979, following the death of his father, he returned to Taiwan to lead his family's business, and today he is chairman of the board of Chinfon Group, a leading Asian industrial and financial giant with more than 20 companies worldwide.

"Not many people are given this kind of opportunity," Huang says. "I regard myself as a very fortunate person to have been exposed to these two fields. I will not say that I am successful in both, but a lot of nice and capable people have helped me along the way, for which I have always been grateful. For me, to be a good and responsible worker one has to have a sincere heart, a modest attitude, a learning urge, and a helping hand. Physicians and businessmen are not that different in this regard."

Huang was a recent graduate of the medical school at National Taiwan University when a friend persuaded him to come to Missouri Baptist Hospital for further training. Nine months later, Huang jumped at the chance to study at Washington University under the renowned neurosurgeon Henry G. Schwartz—a once-in-a-lifetime opportunity. He worked with Schwartz for five years, and he says, "In Taiwan we were doing neurosurgery in a more primitive way. So I had some catching up to do, especially as a foreign student."

Ralph G. Dacey, Jr., the Henry G. and Edith R. Schwartz Professor and chairman of the Department of Neurological Surgery, says, "Dr. Huang embodied..."
the spirit of the neurosurgery department as a scholar and hard-working physician. Dr. Henry Schwartz, the head of neurosurgery at that time, was extremely fond of Dr. Huang and treasured his visits to St. Louis in recent years. Dr. Huang's generosity has made it possible for a new generation of young neurosurgeons to aspire to the standards he set as a resident.

Later in life, Huang became a very generous supporter of both Taiwan University and Washington University. He says, "Since I don't practice medicine anymore, I can only help and cure patients indirectly. These two institutions' medical schools are among the best, so this is an alternative means for me to continue my duties as a doctor."

Since 1992, Huang has given nearly $4 million to endow professorships and support academic operations for the Department of Neurological Surgery at Washington University School of Medicine, and to support the Danforth Scholars program. Huang remembers his colleagues as "very important to me. They were my dearest teachers and colleagues, forever family and friends, who gave me a lot of support, assistance, and love. We were all very close, and I respect them a lot. It was very fortunate for me to have them as my teachers and good friends, and they made my stay and practice in St. Louis a lifetime-cherished experience."

**MEDICAL PRACTICE**

Following his training at the School of Medicine, Huang returned to Asia. Because of the unstable political climate in his native Taiwan, he established a neurosurgery center at Yodogawa Christian Hospital in Osaka, Japan. Although he recalls that "living in Japan at that time as a foreigner was very difficult," Huang remained for 14 years before returning to St. Louis in 1975 with his wife and three children. He had planned to return earlier, but the Yodogawa Hospital encountered a management crisis and Huang was appointed acting superintendent. He stayed to help.

Back in St. Louis, Huang returned to Washington University and the Barnes Hospital Department of Neurosurgery. He stayed in St. Louis four more years, serving at Veterans Administration Hospital and City Hospital.

**SECOND CAREER**

When his father died in 1979, Huang took a year's leave of absence to deal with his family's affairs. He knew his father had several companies, but he was surprised to discover there were more than 30, including the largest manufacturer of automobiles and motorcycles in Taiwan. For a time he continued to pursue both business and science, serving as a professor of medicine at Taipei Medical College in Taiwan until the demands of running an international corporation became too great.

Leaving neurosurgery was a difficult decision, but Huang approached it with a surgeon's precision. Of his two careers, he reflects, "If there are differences, I think the biggest is that physicians try to keep patients healthy and happy, and serve patients, while businessmen try to keep a company healthy and happy, and serve the society."

Huang's healing hand has served his companies, and society, well. Today Chinfon Group's interests range from manufacturing and selling automobiles and motorcycles to commercial banking, financial services, construction, trade, and overseas investments concentrated in the United States, Southeast Asia, and China. It is one of the largest foreign investors in Vietnam.

**A GLOBAL COMMUNITY**

In 1996, Washington University launched the International Advisory Council for Asia (IACA), and Shi Hui Huang agreed to serve as its first chairman. The group of distinguished alumni and friends works to strengthen the University's ties to educational, corporate, and government institutions in Asia and to bring scholars and leaders to campus in St. Louis as part of a rich, diverse student experience. At his inaugural address in 1995, Chancellor Mark S. Wrighton said, "Washington University will remain among the leading educational institutions only if we are preparing our students to live and work in an increasingly international world."

Huang, now emeritus chair, says, "What makes the IACA great is that all the members are dedicated to making Washington University a better university. I am very honored to have been given the opportunity to serve." He also serves as the international chair for the Campaign for Washington University.

William A. Peck, executive vice chancellor for medical affairs and dean of the medical school, sums it up: "Shi Hui Huang is a man of incredible accomplishments; he is an outstanding neurological surgeon, a world-leading industrialist, a major contributor to the betterment of Southeast Asia, and a wonderful husband and father. His major contributions to our Department of Neurological Surgery, under Ralph Dacey's direction, have assisted significantly in propelling it into the upper ranks of departments of its kind in the nation and the world."

—Susan Woolseyhan Caine
Brokaw Praises Old-Fashioned Virtues

Alumni and friends celebrated Founders Day on November 9, 2002, at America's Center in St. Louis, where distinguished alumni and faculty were honored. Tom Brokaw, anchor of NBC Nightly News, was the guest speaker.

Reflecting on the challenges facing our society and the world today, Brokaw emphasized the importance of "the old-fashioned virtues of vision and courage and common cause," paid tribute to the honor of public service, and defined patriotism as "not blind loyalty but informed participation." He said, "America remains a place more interested in solutions and in unification than in division and confrontation," and concluded that this is "an unparalleled opportunity to define our time and leave our legacy."

Distinguished Alumni Awards

F. Gilbert Bickel, III, B.S.B.A. '66, is a first vice president of the Merrill Lynch Private Client Group. In addition to his career in the financial services industry, Bickel serves as a director of many public and private companies and is very active in the St. Louis community. A longtime volunteer at the Olin School of Business, he is director of the Skandalaris Fund and is a former president of the School's Alumni Association. He is a past and current member of the Alumni Board of Governors, where he is currently vice chair for Annual Giving.

In 1993, Zhangliang Chen, Ph.D. '87, was one of the first young scientists from China permitted to study in the United States. As a graduate student he became one of the pioneer scientists in transgenic plant technology. Chen then established the National Laboratory of Plant Genetic Engineering at Peking University. Today he is president of China Agricultural University and vice president of Peking University, where he is in charge of high-technology enterprises. He is also the founder of one of the largest biotech groups in China. Chen has received many international honors and was named to TIME's "Global 100 Roster of Young Leaders for the New Millennium."

Distinguished Faculty Awards

Rosa M. Dávila is an associate professor of pathology and immunology at the School of Medicine and the first board-certified cytopathologist in the St. Louis area. She joined the medical faculty in 1988 and has become a national leader in her field. Students have honored her with seven awards for teaching excellence.

Lee Epstein, the Edward Mallinckrodt Distinguished University Professor of Political Science in Arts & Sciences, came to the University in 1991, and in 2000 she also joined the faculty of the School of Law. She has received Faculty of the Year and Professor of the Year awards and is recognized as one of the nation's leading scholars on law, the courts, and judicial politics.

Ronald A. Leach, who was installed as the Halsey Cooley Ives Professor of Art on November 15, 2002, has been a faculty member of the School of Fine Arts, where he is professor of the practice of art history and director of the program in the history of art and architecture.

Joseph M. Davie, M.D. '68, spent 10 years as head of microbiology at the School of Medicine before leaving to join G.D. Searle & Company, where he became president of Research and Development in 1987. Before coming to the School of Medicine, Davie was a resident in pathology at the National Institutes of Health. He retired in 2000 as senior vice president at Biogen, Inc., where his pioneering research led to new therapies for hepatitis and multiple sclerosis. Davie is a member of the Institute of Medicine in the National Academy of Sciences. He is an active volunteer at Washington University and received an Alumni Achievement Award from the School of Medicine in 1993.

Mark Levin, B.S.Ch.E. '73, M.S. '74, launched Millennium Pharmaceuticals in 1993. The company has been revolutionizing the biopharmaceutical industry ever since, by applying genetics to drug discovery with the eventual goal of targeting drugs to individual patients. The company partners with top pharmaceutical firms to accelerate the process of drug discovery and development, and it fosters a corporate culture that helps attract top scientific talent. Levin's background includes association with top biotechnology and biomedical firms and the field of venture capital. He is a peer-appointed member of the National Academy of Engineers.

Thomas E. Lowther, J.D. '62, M.L.A. '99, is a partner with the Stolar Partnership in St. Louis and has been associated with the firm since 1961. Lowther is a dedicated volunteer in the community and at the University, where he served on the Alumni Board of Governors for seven years, including a term as chair. At the School of Law, Lowther is a member of the National Council and has served on several committees, and he received the School's Distinguished Alumni Award in 1997. He pursues his interest in history and archaeology through travel and continuing education at University College.

Richard B. Teitelman, J.D. '73, was appointed to the Missouri Supreme Court in February 2002 after serving on the Missouri Court of Appeals from 1998-2002. He spent 23 years at Legal Services of Eastern Missouri, almost 18 years as executive director and general counsel, and led the organization to a national reputation for programs and services for the underrepresented. He is president-elect of the Missouri Bar Association, and his tireless service to his profession and the community has earned him a long list of awards and honors. At the School of Law, he is a member of the Order of the Coif and serves on the Alumni Executive Committee; he received the School's Distinguished Alumni Award in 1999.

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Alumni and friends around the country participated in community service projects as part of the Washington University Alumni Network Month of Caring in October 2002. We are proud to report that more than 500 alumni across the country participated, and plans are under way for a very special community service month in 2003 to celebrate the University's Sesquicentennial.

By serving local communities on behalf of Washington University, alumni and friends continue the University's great tradition of service to others. Each alumni club selects an organization that meets important needs in its community, from preparing home-delivered meals to building a house to donating blood. Each project provides fun and a meaningful experience for all who participate.

Robert S. Brookings Awards

Whitney R. Harris was awarded the Legion of Merit for his service as a prosecutor of German war criminals at Nuremberg, of which he later published the definitive book *Tyranny on Trial*. His distinguished career has included serving as a professor of law, director of public and governmental legal organizations, and executive director of the American Bar Association, as well as working in corporate practice for Southwestern Bell Telephone Company and in private practice. In 2002, the School of Law honored his achievements by naming the Whitney R. Harris Institute of Global Legal Studies in his honor.

As successful entrepreneurs and dedicated philanthropists, Robert and Julie Skandalaris established the Skandalaris Entrepreneurship Program at the Olin School of Business to further the development of entrepreneurial skills in America's next generation. The Skandalaris served as co-chairs of the Parents Council in 2001–2002 and continue to serve on the Detroit Regional Cabinet, Campaign Committee, and Alumni and Parents Admission Program. Bob is a member of the Olin School National Council and recently was named to the University's Board of Trustees.

Love Reading Washington University in St. Louis Magazine?

Now it's easier than ever for alumni to stay connected to the University via the new e-mail newsletter, @Washington University in St. Louis, with monthly updates on research, scholarship, people, and other University news. It's a free service, and it's easy for alumni to subscribe online—just register in the alumni directory at www.wustlconnections.com. When you log on, be sure to have ready the seven-digit number that appears above your name on the mailing label of this magazine.
We want to hear about recent promotions, honors, appointments, travels, marriages (please report marriages after the fact), and births so we can keep your classmates informed about important changes in your lives.

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Entries will appear, as space permits, in the earliest possible issue, based on the order received.

ALUMNI CODES

AR Architecture
BU Business
DE Dentistry
EN Engineering
FA Art
GA Grad. Architecture
HA Health Care Admin.
HS House Staff
LA Grad. Business
LD Grad. Dentistry
GF Grad. Art

GL Grad. Law
GM Grad. Medicine
GT Grad. Nursing
GR Grad. Arts & Sciences
PT Physical Therapy
HS Health Care Admin.
SU Sever Institute
SW Social Work
MT Manual Training
NU Nursing
OT Occupational Therapy
SI Sever Institute
SW Social Work
TI Tech. & Info. Mgmt.
UC University College

Alden Hardie, BA 65, GR 66, is the founder and chairman of Alden Hardie, Inc., which provides management services for multifamily and institutional real estate assets and is based in St. Louis. Since 1970, he has been chairman of the St. Louis Board of Realtors. He received the Alden Hardie, Inc., endowed chair in Real Estate Management at Webster University in 2003.

Dawn Eichhorn, BA 69, is the founder and chairman of Eichhorn & Company, a national, full-service real estate management firm. She received the 2003 Higher Education Leadership Award from the National Association of Real Estate and Finance Executives. She is also a fellow of the American Society of Real Estate Counselors and a member of the American College of Real Estate Counselors. She is also a fellow of the American Society of Real Estate Counselors and a member of the American College of Real Estate Counselors.

Lynn Buck, BA 59, GR 62, moved from Broadhead, a continuing-care retirement community in Cockeyville, Md., in 1994, but retirement was the last thing on her mind. It was then that she began writing her first novel, Eccentric Circles, published in 1997. In June 2002, her second novel, Amanda's House, was added to her list of publications, which includes two books of poetry. Her current project is a murder mystery. She also is editor for the Baltimore Review, a biannual literary journal, and she still finds time for line dancing and water aerobics.

Ann Feldman Freeman, PT 59, is a successful part-time at Des Peres Hospital in St. Louis and enjoying eight grandchildren. She initiated a PACE exercise program sponsored by the Arthritis Foundation.

Glen Stickel, EN 60, a Republican, has been elected to the Metro Council in the newly merged St. Louis-Jefferson County, Kentucky, government. He will represent the 17th district in the merged government, the first major city merger in more than 30 years and one that establishes the St. Louis-Jefferson County area as the 6th largest city in the U.S.

Thomas E. Eichhorn, LW 63, now is executive director of the Association of Regulatory Boards of Optometry, which represents and assists member licensing agencies in regulating the practice of optometry for the public welfare. The national organization is based in St. Louis. Eichhorn joined the association after almost 37 years as legal counsel on the staff of the American Optometric Association.

Judy Rawlins Klutho, LA 61, teaches textiles in the interior design department of St. Louis Community College at Meramec. She and her husband, Jim, reside in Kirkwood, Mo.

Bernie Fuchs, FA 54, moved, as an artist, from creating car ads in Detroit to doing magazine illustrations for New York-based magazines such as GQ, Esquire, and McCall's and then illustrating books. He created illustrations for Shooting for the Moon: The Amazing Life and Travels of Annie Oakley by Stephen Krensky (2002), Ghost of the Southern Belle by Oddis Bodkin (1999), Raising Yoder Barn by Jane Yolen (1998), and other books. He and his wife, Babe, spend a great deal of time in Italy, where one of their daughters, who is a photographer, lives with her Italian husband and two daughters. Fuchs' luminous paintings of Italian streets, parks, and churches appear in several galleries.

Katherine Chambers, LA 23, GR 34, GR 56, who recently turned 100 years old, received the St. Louis Science Center's Lifetime Achievement Award. Chambers taught in the St. Louis Public Schools for nearly five decades, and she still is a volunteer for the Missouri Botanical Garden and the St. Louis Science Center. Since 1929, she has exercised almost every day, and she continues activities at the Altenheim, a retirement and nursing center in St. Louis, where she now resides.

Dave Cornfeld, LW 43, recognized for his work in trusts and estates and tax law at Husch & Eppenberger, was selected by his peers nationwide for inclusion in The Best Lawyers in America 2003-2004.

Robert Dodd, LA 44, OT 45, has been director of rehabilitation at the Buffalo (N.Y.) Goodwill Industry for his work in trusts and estates and almost every day, and she continues activities at the Altenheim, a retirement and nursing center in St. Louis, where she now resides.

Jimmy Hardy, FA 66, is nationally acclaimed sporting artist, has had his new book, The Paintings of Eldridge Hardie--Art of a Life in Sport, published by Stackpole Books. It celebrates Hardy's four decades as one of the nation's best-known sporting artists, whose passions for trout fishing and bird hunting became the subject matter of his art.十九大

Edward Ragdale, MD 64, was elected to the American Occupational Therapy Association board of directors in 2002. He received the 2002 Excellence in Service Award from Alton (Ill.) Memorial Hospital. The award is presented annually to a member of the hospital's medical staff in recognition of contributions to the hospital and community. Ragdale, a radiologist who has served at the hospital since 1970, has been chairman of the medical imaging department since 1989.

Robert Levy, LA 66, received the Luigi Mastroianni, Jr. Clinical Innovator Award from the University of Pennsylvania School of Medicine in recognition of his contributions to clinical advances concerning artificial-heart-valve research, as well as discoveries related to gene-expression studies for vascular disease. Levy is the William J. Rashkind Endowed Chair in Pediatric Cardiology at the Children's Hospital of Philadelphia and the University of Pennsylvania School of Medicine. For the latter, he also is professor of pediatrics and pharmacology.

Alan Popkin, GR 63, GR 66, and Thomas Mann, LA 84, were married on May 21, 2002.

Eleanor (Quinn) Hingtgen, OT 64, received a National Educator's Award from the American Occupational Therapy Association in 2002. She is a retired faculty member at the University of Wisconsin-Madison. Hingtgen is a board-certified occupational therapist who has worked in a variety of settings, including hospitals, rehabilitation centers, and schools.

Richard Lovelace, EN 64, a professor at Cornell University in Ithaca, N.Y., was elected a fellow of the American Physical Society "for pioneering contributions to the physics of astrophysical jets and disks, the discovery of the period of the Crab Nebula pulsar, and the study of turbulence in the interplanetary medium." The number of fellows is limited to less than 0.5 percent of the membership.

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University of Georgia in Athens, is sought after by media outlets worldwide for his political analyses. Interested in politics even before college, he earned master’s and doctoral degrees in political science from WU. Bullock, who gives between 500 and 600 interviews yearly, hopes to help the public understand the political process.

Harvey Tettlebaum, LW 68, GR 68, recognized for his work in health-care law at Husch & Eppenberger, was selected by his peers nationwide for inclusion in The Best Lawyers in America 2003-2004.

Peter Brown, LW 69, recognized for his work in trusts and estates at Husch & Eppenberger, was selected by his peers nationwide for inclusion in The Best Lawyers in America 2003-2004.

Maury Poscover, LW 69, recognized for his work in banking law, business litigation, corporate mergers and acquisitions, and securities law at Husch & Eppenberger, was selected by his peers nationwide for inclusion in The Best Lawyers in America 2003-2004.

Michael H. Covert, BU 70, HA 72, is now chief executive officer of Palomar Pomarado Health District, which operates Palomar Medical Center in Escondido, Calif., and Pomarado Hospital in Poway, Calif. Previously, he was CEO of Washington Hospital Center in Washington, D.C.

Robert W. Eckles, GB 70, who resides in Colorado Springs, says, "I'm retired and loving it!"

Stanley Vogel, MD 70, has received the Bal Jeffrey Award from the Starmont-Vail Foundation in Topeka, Kan., for his commitment and dedication to cancer research. He has contributed to health care in northeast Kansas since 1978, when he became a physician with the Cotton-O'Neill Clinic of the Starmont-Vail HealthCare network.

Joseph E. Madison, LA 71, as part of a campaign to end slavery in Sudan, was part of an international group that helped free more than 7,000 slaves and return them to their families. He also was part of a coalition that helped bring about the Sudan Peace Act after 20 years of war.

Rick Newton, LA 71, received the 2002 Translation Prize from the Modern Greek Studies Association of America and Canada for his translation of the Greek novel, Flora of the Waters, by Ismene Kapanda. Rick and his wife, Evangeline Vlanton Newton, LA 70, recently celebrated their 30th wedding anniversary. Rick is chairman of the Department of Modern and Classical Language Studies at Kent State University, in Kent, Ohio, and Evangeline is an associate professor of education and director of the Literacy Center at the University of Akron.

Dave O'Brien, EN 71, is vice president of Dynamic Bulk Systems, a manufacturer's representative company based in Fenton, Mo., that sells industrial equipment for a diverse group of everyday products.

H. Michael Hersh, DE 72, recently completed a three-year residency in prosthodontics at the Veterans Administration/University of California at Los Angeles Medical Center. Hersh plans to teach graduate periodontics and prosthodontics at Loma Linda University Medical and Dental Center and operate a private practice part time. He also serves as a dental-legal consultant.

Marlene Hunter, LA 72, a 24-year veteran of the FBI, recently was selected by the U.S. Secretary of Transportation to be the federal security director for the Luis Munoz Marin International Airport in San Juan, Puerto Rico.

Stephen Kernan, LW 72, has stepped down as chief judge of the 20th Judicial Circuit in Illinois and chairman of the Illinois Chief Judges Conference. (The 20th Circuit is made up of St. Clair, Monroe, Randolph, Washington, and Perry counties.) One of his major accomplishments was the Children First program, which requires parents who are divorcing to take classes to minimize harm to their children from the breakup of their marriage. After 28 years on the bench, he plans to practice law. Kernan resides in Belleville, Ill., with his wife, Gina, a son, 11, and a daughter, 7.

Sanford Teplitzky, LA 72, who chairs the Health Law Department at the law firm of Oberklauer, in Baltimore, is listed in The Best Lawyers in America 2003-2004 for his depth of experience and knowledge in the area of health care. Less than 1 percent of all attorneys in the nation are selected for this honor, and he has been listed in the publication for more than 10 years.

Richard Katz, LA 73, a recognized expert in feeding disorders of children, has joined the Mt. Washington Pediatric Hospital, in Baltimore, as vice president of medical affairs. He remains on the full-time faculty of the Johns Hopkins University Department of Pediatrics.

Ronald Warren, LA 75, wrote The Achievement Paradox: Test Your Personality, Choose Your Behavior for Success at Work, a book recently published by New World Library.

Roth Banks, LA 76; GR 81, has been named director of curriculum and staff development for the Normandy School District in the St. Louis area. As such, he handles curriculum development for elementary and secondary schools and the training of staff members.

Banks, who also earned a master's degree from the University of Missouri at St. Louis and a doctorate in education from Saint Louis University, has worked in the district for more than 10 years.

Caroll Purdy, GR 76, has been awarded an Academy Award Fellowship by the Royal Flemish Academy of Belgium for Science and the Arts. It provides for her to be in residence from January through June 2003 at the Flemish Academic Center in Brussels. Her principal research focuses on the paintings of Jan van Eyck, a 15th-century Flemish artist.

Roberta Leigh Silver, LA 76, resides in Harrisburg, Pa., with her children—Hillary, 10, and Nathaniel, 6. Silver works there for the Pennsylvania Department of State as counsel to the State Board of Podiatry and the State Architects Licensure Board. Her personal activities include tap-dancing performances with the Harrisburg Academy of Dance at the Hershey Theater in Hershey, Pa., and the Whittaker Center for Arts and Sciences in Harrisburg.

Ann Rubenstein Tisch, LA 76, a University trustee, who spent 19 years in broadcast journalism, is the founder of the Young Women's Leadership School in Harlem, where girls who previously did not have chances for success, can study reading, then science, math, and technology. The school has been duplicated in Chicago for girls and in Philadelphia for boys. In September 2003, five more schools are expected to open in Dallas and New York.

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Treasuring the Past

Eyes on the Sky

The Washington University Observatory originally opened on the Downtown Campus in 1878 at 18th and St. Charles streets. Although the building was modest, it was a hub of scientific activity and served as a source of standard time for the region. The observatory's six-inch telescope, situated now atop Crow Hall on the Hilltop Campus, is the oldest instrument still in use at the Department of Physics in Arts & Sciences.
Mark Arnold, LW 77, recognized for his work in business litigation at Husch & Eppenberger, was named a member of the national bar by The Best Lawyers in America 2003-2004.

Barbara Behar, PT 77, continues to practice part time as a home-care physical therapist for a group of clients while spending her husband's retirement. She has two teenagers.

Jo Ellen (Workman) Jacobs, GR 77, professor of philosophy at Millikin University in Decatur, Ill., has had her book, The Voice of Harriet Taylor Miller, published by the Indiana University Press. It is an innovative biography of the Victorian radical, feminist economist, philosopher, and author, who was the wife of John Stuart Mill.

Barbara Miksicek, LA 77, has worked for the St. Louis Police Library for 20 years. She joined the library in 1982 as assistant librarian and became head librarian in 1985. As keeper of the library's 15,000 books and 120 magazine subscriptions, Miksicek keeps weapons and equipment, historic fingerprints, and mug shots, she receives many calls from Hollywood for props and information for movies such as King of the Hill and Red Dragon.

Glenn Anstemer, LW 78, a partner at the law firm of Lane, Powell, Spears, and Lubersky, has been a board chairman of the board of trustees of Cornish College of the Arts in Seattle. The college offers baccalaureate studies in the performing and visual arts.

Neil Caesar, LA 78, president of the Health Law Center, a law firm for healthcare providers nationally, now writes a legal-ops blog on the firm's website, the National Collar of the Hill and Red Dragon.

Pat Morton, SW 79, was elected president of the Illinois Association of School Social Workers for 2002-2003. For 11 years she has been a school social worker for West Central Illinois Special Education Cooperative. She resides in the Upper Midwest and is proud of her son, Mike, 21, who is serving in the U.S. Marine Corps.

Jan Whitaker, GR 80, had her first book, I've at the Blue Lantern Inn, published in December 2002 by St. Martin's Press. It is a social history of the tea-room craze in America in the early 20th century.

Melissa Wood, FA 80, has been an award-winning month-long artist residency and exhibition at the de Young Art Center in San Francisco in 2003. She also has had four studio demonstrations at the Legion of Honor in San Francisco. She resides with her husband, geographer Stephen Coffeen, and their studio mascot—Pinka, the rescue dog—in Davis, Calif.

Jeffrey Kootman, DE 83, in private practice in Phoenix, is president of the Arizona Society of Oral Maxillofacial Surgeons and president-elect of the Phoenix Society of Oral & Maxillofacial Surgeons. He and his wife, Sally, who have two children in high school, celebrated their 20th wedding anniversary.

David Levine, LA 83, and his wife, Kate, were recently in Los Angeles, where Levine spent a week with the other 16 winners and published finalists in the Writers of the Future Contest. Soon after, they made another trip to California for ConJose, the annual World Science Fiction Convention, during which Levine led several panels and had a reading. His story, The Tale of the Golden Eagle, should be out soon.

Dan Schmidt, LW 83, a Republican, was elected to the 3rd District Appellate Court, which hears state-level appeals for counties in north-central Illinois.

Bob (aka) Luba, LW 83, has a full-time cosmetic dentistry practice in Monterey, Calif. Luba and her husband, Dan, a gastroenterologist, have four children—Ada, 11; Rachel, 16; Jake, 9; and Joey, 7.

John Dacey, LA 85, has been promoted to head supervisor at J.T. Diggit Corporation in Alexandria, Va. He oversees a team of pressurized ferkins, a trade name for vessels used in the process of chemical activation of a wide range of polymer lattices. E-mail: Ruby007@aol.com.

Suzanne Marolf, OT 85, who resides in Broken Arrow, Okla., has been in private practice for four years specializing in the treatment of upper extremity disorders. She has been married for 20 years and has three children.

Hugh Chou, SI 86, system analyst and consultant in the Department of Earth and Planetary Sciences in Arts & Sciences, has created Internet-based calculators that he offers on his Web site to help people with personal finance calculations. His site, hughchou.org, is likely as popular for its witty commentary as it is for its calculators, which include ones for amortization on a home mortgage, the CPI/Inflation Multiplier, the Alternative Minimum Tax, as well as a Wealth Percentile Score calculator, a "How Many Years to Afford" calculator, a "Retirement Savings Calculator," and a "Savings Calculator," showing savings of brown-bagging. For a small fee, which Chou gives to a designated charity of the month," he provides calculator construction services or personalized assistance.

Thom Duncan, LA 86, and his wife, Rebecca, announce the birth of Lillow Amelie, on Aug. 29, 2002. Her sister, Susannah, is 4.
Seeking
Fixed Income?
See page 9

Robert S. Brookings
Guaranteed Income for Life

The Washington University Charitable Gift Annuity, see page 9
Thom and Rebecca work in communications for the Kellogg School of Management at Northwestern University in Evanston, Ill. E-mail: thom@kellogg.northwestern.edu.

Allen Icet, GB 86, a Republican, represents the newly created 84th district of west St. Louis County in the Missouri House of Representatives. Icet, an engineer with the Monsanto Company, served on the Rockwood School board from 1994 to 1996. He hopes to use his financial expertise to help resolve state budget issues.

Andrew Judson, BU 86, bucked the odds in starting his own business—The Topspin Group—a promotional marketing company, about a year ago. Though the economy was in a downspin, he and his business partner, Bob Ryan, began the company, whose work is in tiebreaker marketing for a Houston hotel chain, she had an "a-ha" moment. She had just heard the hotel's general manager stress the need to fill empty rooms, and that same day she had read about a year ago. Though the economy was in a downspin, he and his business partner, Bob Ryan, began the company, whose work is in tiebreaker marketing for a Houston hotel chain, she had an "a-ha" moment. She had just heard the hotel's general manager stress the need to fill empty rooms, and that same day she had read

Project Debby Helps Rebuild Lives

One day in 1989, when Naomi Berman-Potash was director of sales and marketing for a Houston hotel chain, she had an "a-ha" moment. She had just heard the hotel's general manager stress the need to fill empty rooms, and that same day she had read

Communication virtually, she had an "a-ha" moment. She had just heard the hotel's general manager stress the need to fill empty rooms, and that same day she had read

Communicate virtually via computer. The company is based in Princeton, N.J., and workers' home offices are in New Jersey and Pennsylvania. The products they create, such as radio ads, coupons, and Web design, for clients such as Johnson & Johnson, Visa, pickles, and PlayMobil toys, are designed to enhance brand value. Judson, who manages the business, had many years of marketing experience with such companies as Cheez-It crackers, Absolut vodka, and Trident gum. When not working, he spends time with his wife, Ellen, and three children—Michael, 7; Eric, 4; and Rachel, 2. The family resides in Berkeley Heights, N.J. E-mail: ajudson@topspingroup.com.

Mary Lenze-Acton, BU 86, LA 86, has returned to the Washington, D.C., area with her family after six years overseas.

Lori Rubin-Nacht, LA 86, and Brad Nacht, LA 86, announce the birth of Daniella Rose, who joins brothers, Jacob and Sam. The family resides in Riverdale, N.Y.

Kenneth Srebnik, BU 86, and his wife, Lynne, announce the birth of Emma Rudy, on Oct. 7, 2002. The family resides in Hermosa Beach, Calif. Ken has returned to Nissan North America as part of the Global eBusiness team, dividing time among Paris, Tokyo, and Los Angeles.

Lori Brunsman, LA 87, and David Brunsman, EN 87, announce the birth of Eleanor Clara on Feb. 3, 2002. The family, including five siblings, resides in Occoquan, Va. E-mail: brunsman@erols.com.

Lora Friedrich, SW 87, was appointed chair of the social sciences department and director of women's studies at Simpson College, where she teaches sociology and social work. The college is located in Indianola, Iowa, near Des Moines.

Eric Green, MD 87, GM 87, HS 91, is now scientific director of the National Human Genome Research Institute, one of the National Institutes of Health. Green, a St. Louis native, who, after graduate school, a residency, and a fellowship at Washington University, became an assistant professor in pathology and genetics at the University, joined the institute in 1993. Green will lead the Division of Intramural Research, focusing on translating knowledge gained from the Human Genome Project into medical benefits.

Keith Savage, LA 87, became senior pastor of First Baptist Church in Manassas, Va., in

During an appearance on The Oprah Winfrey Show, Naomi Berman-Potash (left) happily received news that, through Oprah's Angel Network, Target and Wal-Mart would provide gift cards to agencies affiliated with Project Debby so they could buy gift baskets, filled with essential items, for abused women and their children.

mainly interested in archaeology, anthropology, and metallurgy. Most important, though, my experiences helped open my eyes to events in the wider world and to many cultures and how they interact." She adds, "I learned how to approach people of diverse backgrounds and skills, and how to organize and use resources efficiently.

"I'm also glad my parents and the University emphasized the importance of volunteering," she says. "Helping women rebuild their lives is important and rewarding work."
August 2002. He and his wife, Bonita, and their children, Keith II and Kayla, reside in Manassas.

E-mail: savagelbs@staff.net.com.

Eileen Zegura, EN 87, SI 90, a terrestrial biologist at the Georgia Institute of Technology (Georgia Tech), recently served as acting dean of the Georgia Tech College of Computing.

Beth Lyon Applebaum-Bimston, LA 88, and David Bimston, LA 88, announce the birth of Samantha Illyse on Aug. 12, 2002. She joins sister, Danielle, 4. The family resides in Fort Lauderdale, Fla., where David practices surgical oncology.

Bethany Einstein, LA 88, and Doug Einstein, LA 88, announce the birth of their twin son and daughter, Seth and Abby, on Feb. 10, 2002. They now have four children—Sarah, 4, and twins, Seth and Abby, 3. Frank is a partner in private practice and works with adolescents and the telecommunications industry from Philadelphia. E-mail: einsteins@adelphia.net.

Ephraim Fish, LA 88, is enjoying living in New York City, where he recently started his own long/short U.S. equities hedge fund. E-mail: Ephraim@EphraimFish.com.

Colleen Quinn, LA 88, wishes to inform friends that her husband has been named 3/4 of the McGraw-Hill Board of Directors. The family resides in New York City.

Dawne Brenner Rinzler, LA 88, and her husband, Keith, and their three children—Emma, 4; Charlie, 2; and Josephine, 2—have moved to Iowa City and look forward to seeing their University friends visiting Atlanta. E-mail: Dawne@rinzler.net.


Bradley Frank, GR 89, GR 92, resides in Houston and is the father of Kyle, 5, and twins, Sara and Sam, 2. Frank is a partner in a private practice, working with adolescents and adults.

Ben Klayman, LA 89, and his wife, Rachel Hart Klayman, announce the birth of their third child, Daniel Hart Klayman, on Nov. 19, 2002. Ben still works for Reuters, covering the telecommunications industry from Chicago. E-mail: benjamin.klayman@reuters.com.

Greg Moore, GB 89, is now president and CEO of SmartPipes, a provider of policy-based networking software.

Teresa A. Caldwell, SW 90, is assistant professor of internal medicine with the oncology division at the Eastern Virginia Medical Center/Sentara Cancer Institute in Norfolk, Va. She also works in the practice of Joanne Scott, for professor of medicine at Washington University, as coordinator of psychosocial support for those touched by cancer.

Jonathan Fox, LA 90, recently had his first book, Ethnoreligious Conflict in the Late Twentieth Century, published by Lexington Books. He is a lecturer in political studies with the oncology division at the University of California, San Francisco.

Carolyn (Estreicher) Hauptman, BU 90, is the chief financial officer at Moss/Dragot and is on the board of directors of DDB advertising agencies in New York City. She and her husband, David, reside in Chappaqua, N.Y., with their daughters—Lindsey, 14; and Amanda, 2. E-mail: Carolyn.hauptman@mossdragot.com.


Sharon Lowenstein Morduch, LA 90, and her husband, Jeff Morduch, announce the birth of twins, Marcus Jeffrey and Jonathan Ryan, on June 27, 2002. The family resides in New York City.

Lisa (Eiges) Raymond, PT 90, and her husband, Kurt, announce the birth of Sophia, on April 20, 2002. The family also includes Bryan, 4; Lisa, 4; and Peak Physical Therapy, an outpatient orthopedic clinic in Park City, Utah.

Sue (Lisard) Romm, LA 90, and her husband, Howard, announce the birth of twins, Andrew and Emily, on March 1, 2002. The family resides in West Palm Beach, Fla.

Suzanne Rittenberg Rubinstein, LA 90, and her husband, David, announce the birth of Sarah Haley, on April 11, 2002. She joins a brother, Adam Jack. The family resides in San Francisco. E-mail: susanner@hotmail.com.

Peter A. Tenhula, LW 90, is now co-director of the Spectrum Policy Task Force of the Federal Communications Commission. As such, he will be primarily responsible for coordinating all spectrum policy activities across the various bureaus, with Congress, and with the administration.

Jose Bedoya, GB 91, president of Otology LLC, a Colorado-based technology company he founded to develop implantable devices to assist the severely hearing-impaired, has been named to the board of directors for SurModics, a provider of surface modification coatings for medical devices. The company is based in Eden Prairie, Minn.

Lori (Mutterperl) Bosses, LA 91, and David Bosses, LA 91, announce the birth of Amanda, on June 29, 2002. She spent the next week on the move in a new apartment on the Upper West Side of New York City.

Annie (Egisti) Fullington, BU 91, and her husband, Greg, announce the birth of their second child, Allison Elizabeth, on June 28, 2002. She joins Emily Louise, 3. The family resides in Snoqualmie, Wash., near Seattle. E-mail: gatulle@juno.com.

James Huang, EN 91, MD 96, and his wife, Grace, announce the birth of Jason Jun-Wei, on April 14, 2002. The family resides in Tampa, Fla., where Grace is an attorney with Holland and Knight and James has begun a transplant surgery fellowship with LifeLink Transplant Institute.

Rick Johnson, LW 91, an attorney, was re-elected to the Missouri House of Representatives from the 90th District, which covers northwestern Jefferson County, including portions of High Ridge, Murphy, Springfield, and the area near Festus.

Susan Gail Josephson, LA 91, and Gary Edward Karp were married on Nov. 2, 2002, in Mystic, Conn. The couple resides on the Upper West Side of Manhattan. Gary has two cats, Jack and Henry. Susan is a human resources manager in the financial services group at Accenture, a management consultant and technology services organization. Gary, also a manager at Accenture, manages an outsourcing relationship with Sony Electronics.

John Miller, EN 91, associate and partner with PricewaterhouseCoopers, is co-founder of Peak Physical Therapy, an outpatient orthopedic clinic in Palo Alto, Calif. Soon after the firm won commissions for many significant building projects in the St. Louis area, Miller also recently completed his first novel, an action-adventure thriller titled Malocclus Terrors.

Jeffrey Pault, GR 91, is now project scientist for NASA’s 2001 Mars Odyssey mission. He had been deputy project scientist for Odyssey, Pluton Residues in Pasadena, Calif., with his wife and daughter.

Karyn Weinberg Polak, LA 91, announces the birth of Talya Abigail on Nov. 12, 2001; Talya joined Tovah Abigail David, now 2. Polak now is a senior capital projects associate at Jones, Day, Reavis, and Pogue in New York City. E-mail: pkpolak@jdr.com.

Shannon Sock, EN 91, GB 93, has been named chief resource officer for the Sisters of Mercy Health System, based in St. Louis. Previously, Sock was executive director, resource management, for the system.

Barbara (Wehmeyer) Stock, EN 91, and her husband, Dan, announce the birth of Bridget Anna, on Sept. 30, 2002. The family, which includes Leah, 4, and Stephanie, 2, resides in Belleville, Ill.

Eleanor Liptman, LA 92, is a senior project manager with Greater Philadelphia First, a regional business leadership group working on economic development issues.

Debra Berenson, OT 92, is the assistant chief of occupational therapy at the New York Presbyterian Hospital–Cornell Medical Center in New York City.

Lorrie Faith (Ackerman) Cranor, EN 92, SI 93, SI 96, finished her first book, Web Privacy with P3P, which was published by O’Reilly & Associates in October 2002. She and her husband, Charles “Chuck” Cranor, SI 92, SI 98, and son, Shane, reside in Mountain View, Calif.

Carolyn (Dick) Kupietzky, LA 92, and her husband, Jeff, announce the birth of Ezra on Aug. 29, 2002. He joins his sister, Betzalel, nearby 2. The family has moved from Palo Alto, Calif., to Los Angeles.

Sarah Kurnit Levy, LA 92, and Jason Levy, LA 91, announce the birth of Dylan Paige Levy on April 29, 2002. The family, including daughter, Alexa, resides in Atlanta, where Jason is a radiologist in private practice.

Pamela G. Sikes, UC 92, received the St. Louis Technology Award in April 2002 for an Internet application titled Diabetes Mama, which allows people with diabetes access to tools to care for their diabetes at home.

Mark Forsyth, LA 93, joined McDonnell Haynes Advertising as an interactive art director. Mark and his wife, Jennifer, and 3-year-old son, Nolan, reside in Toronto, Ontario.

Spencer Corey Greene, LA 93, and his wife, Starr Roberts Greene, are expecting their first child in May 2003. The couple resides in Nashville, where Spencer is a resident physician in emergency medicine and Starr is training to be a nurse practitioner.

Michele Hartrich-Wright, OT 93, and her husband, Dusty, announce the birth of their second child, Aidan Noah, on Aug. 27, 2002.

Jennifer Haddad Langen, LA 93, and her husband, Dave, have two boys, Louis Joseph, born Feb. 12, 2000, and John “Jack” Harold, born June 26, 2002. After working for several years in private practice, Jennifer recently became
assistant city solicitor for the City of Cincinnati. Among other things, she'll handle legal issues for the Metropolitan Sewer District. E-mail: jdlangen@msn.com.

Heather (Garrett) Niemann, FA 93, and her husband, Randy, announce the birth of their first child—Daniel Aaron—on April 9, 2002.

Eric Raffin, LA 93, GR 96, HA 96, recently became chief information officer of the Veterans Administration Northern California Health Care System. He and his wife, Angela, recently helped their daughter, Ella, celebrate her first birthday.

Tania Senlu, LA 93, and Kevin Flaherty, BU 93, announce the birth of their first child, Benjamin Espen, on Aug. 24, 2002.

Mark Solovy, BU 93, has founded the Israel America Discovery Fund, a venture capital fund that invests in Israeli early-stage high-tech and life-sciences companies. E-mail: mssolovy@iadventures.com.

Raymond T. Wagner, Jr., GI 93, is to be nominated by President George W. Bush to join the Internal Revenue Service Oversight Board. Wagner is the legal and legislative vice president for Enterprise Rent-A-Car in St. Louis.

Shannon Williams Higgins, BU 94, and her husband, Mike, announce the birth of their first child, Jacob Michael, on March 17, 2002.

Melissa (Goldman) Kaplan, LA 94, and her husband, Brian, announce the birth of Rachael Leigh, born Oct. 3, 2002. The family, including Jonathan, 2, and dog, Calli, 8, resides in Charlottesville, Va., where Melissa recently completed a master's degree and Brian is finishing a residency in ear, nose, and throat. E-mail: mgk5a@virginia.edu.


Jeremy Michael Stillwell, PT 94, and his wife, Tonya, expected the birth of their second child in November 2002. Their daughter, Emily, is nearly 3.

Pauline Koffman Woodson, LA 94, recently began working as an asylum officer at the Immigration and Naturalization Service Office in Chicago. She and her husband, Doug, reside in Forest Park, Ill. E-mail: pkcaso@athbi.com.

Danielle Zeitlen, FA 94, and David Hughes were married on Oct. 6, 2002, in New York City. The wedding party and guests included several University alumni. The couple resides in New York City, where Danielle is a marketing manager for the Oxygen cable network.

Kelly Dunn Campagna, PT 95, and her husband, Frank, announce the birth of Jacob Emerson on Aug. 31, 2002. The couple, married on Sept. 16, 2000, resides in North Royalton, Ohio. Kelly is a physical therapist with Cleveland Clinic SportsHealth.

Heidi Cummins, PT 95, and her husband, Matthew, announce the birth of Jacob Roderick, on Oct. 7, 2002. He joins his sister, Avery.

Rich Francisco, GB 95, has been appointed director of

WASHINGTON PROFILE

Gary DuBois, J.D. '95, M.S.W. '98

Building a Future on Past Traditions

When Gary DuBois completed his Washington University law degree, he returned to the Temecula Valley, midway between San Diego and Los Angeles, to serve his people, the Pechanga tribe of the Luiseño Indians.

But it was 1995 and the tribe wasn't ready for him—yet. The Pechangans had just opened a temporary casino, and a new future was in sight, if not yet in hand.

So DuBois returned to the University to the George Warren Brown School of Social Work, on a Buder scholarship. He completed his master's degree in 1998 with a fellowship in the office of the U.S. Senate Committee on Indian Affairs. And the next time he returned to the Temecula Valley, he found work waiting for him as the cultural resources director for the Pechangans.

His law degree and his M.S.W. have proved invaluable as the tribe strives to convert casino riches—"hundreds of millions" annually—into immediate benefits for its members and to build a future on past traditions.

Initiatives DuBois and the tribe are working on include a partnership with the University of California at Riverside aimed at saving the Pechanga language. More than that, the program is designed to create a system for reviving other nearly extinct languages. The tribe also is planning a heritage museum to attract national and international visitors.

The language program came about when tribal leaders were concerned that the death of their native tongue might be imminent. Only 25 of the 1,400 Pechanga are fluent in Luiseño—one of at least 100 tribal languages in California, half of which are in danger of becoming extinct.

"With the death of an ancestral language, the process of understanding history is changed. It becomes impossible to transmit fundamental culture across the generations," says DuBois. "Our native speakers are almost gone. This is our opportunity to save what we have from extinction."

Tribe leaders approved the program in January 2002; linguist Eric Elliott—a white man fluent in five tribal languages—came on board in July; and a preschool where the language is taught opened in September. Already, Elliott speaks nothing but Luiseño to his youngest students, and he works, as well, with adults and teenagers: "The goal is to train our own people to teach," says DuBois.

As for the Pechanga museum, DuBois negotiated long, hard—and, ultimately, unsuccessfully—for a custodial arrangement with the Southwest Museum of Los Angeles, which has a near-Smithsonian-quality collection of Indian artifacts. The museum idea continues to live, however, but on a smaller scale. "We don't want people to forget where we came from," says DuBois.

Settling the valley 10,000 years ago, the Pechangans were subjugated first by the Spanish in the late 18th century and then by the Mexicans. The Americans arrived in 1848 and began removing Indian villages, eventually establishing the reservation now occupied by 25 percent of the tribe. Then, with a lack of viable businesses, the Pechanga faced cultural extinction.

That changed when California Indians won the right to develop casinos. The Pechanga opened one in a jumble of eight trailers in 1995. Their current one-million-square-foot complex was completed in June 2002 and now employs about 3,000 (fewer than 200 are Indians).

But the tribe is determined to develop its community, not just its casino, says DuBois. Besides the language program and the museum, the tribe pays for private elementary school and members' health-care costs. College tuition is also covered.

(DuBois recruits for Washington University.)

"We don't want the casino to define who we are," says DuBois. "We were here for thousands of years before there was a casino, and we want people to recognize the richness of our culture as well."

—Susan Caba

SPRING 2003 WASHINGTON UNIVERSITY IN ST. LOUIS 43
The wedding party included many first child was expected in 10.

Chur ch in Tulsa, and Daniel is a pediatrician in private practice in Aasser(a:gwu.edu.

George Washington University in internal medicine residency at Washington, D.C., and Elizabeth is a medical student in Cincinnati.

Alexander "Alex" Asser, LA 95, is an EHS compliance program manager in the corporate properties and services operation of General Electric and is based at corporate headquarters in Fairfield, Conn. She resides in Fairfield County. Previously, for six years, she was an environmental engineer for ESC, working in northern Virginia. E-mail: bridgelynn@ yahoo.com.

Theresa (Rehm) Kusel, PT 96 and her husband, Scott, announce the birth of Olivia Marie on Aug. 29, 2002. She joins her sister, Lillie, nearly 3. Theresa is employed at an outpatient orthopedic clinic in Cincinnati.

Carla Loon, LA 96, and Greg Leader, of Yorktown, N.Y., were married on Oct. 12, 2002, in Cincinnati. The couple resides in Columbus, Ohio. Carla is a child welfare attorney in Washington, D.C., and Greg is regional director of affiliate relations for Westbrook One. E-mail: carla looming@dc.gov.

David Michael Mandell, LA 96, has been appointed by President George W. Bush to serve as chief of staff to the administrator of the Federal Aviation Administration (FAA). He works as an FAA administrator Marion C. Blakey’s primary aide and is an advisor in the management and administration of the agency, as well as a key advisor on legal issues. Mandell previously served Blakey as special counsel to the chairman at the National Transportation Safety Board.

Jessica Eisenberg, LA 97, and Benjamin Meth, BU 97, were married on Aug. 24, 2002, in Tarrytown, N.Y. The wedding party and guests included many University alumni. The couple resides in New York City. Jessica, who received a master’s degree in journalism from Northwestern University, is a contributing writer at the Chicago-based magazine. and is originally from Cincinnati. The couple resides in New York City. Jessica, who received a master’s degree in journalism from Northwestern University, is a contributing writer at the Chicago-based magazine.

Ida Rahayun Masoud, BU 97, and Asgha Putra Ghazali were married in April 2000, and their daughter, Clara, was born on May 24, 2001. Masoud is working for an insurance company in Malaysia and pursuing an associate degree in insurance. E-mail: rl2enna@yahoo.com, or idar@mni.com.my.

Stephanie Pevestein, LA 97, and Aaron Goldberg were married on March 23, 2002, in Washington, D.C. The wedding party and guests included many University alumni. The couple resides in Richmond, Va., where they are students at the Medical College of Virginia, part of Virginia Commonwealth University. E-mail: srepevens@hsc.vcu.edu.

Kathleen Sheppard, AR 97, and Paul Curry were married in October 2002 in Atlanta, where they reside. Kathleen is a project architect with the firm GSSTH. E-mail: kath72@ mindspring.com.

Stacy Welsh, GR 97, is a full-time student working toward a Master of Divinity from Columbia Theological Seminary in Decatur, Ga. She was awarded a Columbia Scholarship and an Omaha Seminary Foundation Scholarship. Welsh also is a part-time youth director for Druid Hills Presbyterian Church in Atlanta.

Ellen (Rugen) Ewing, LA 98, is special events coordinator for the Greater Missouri March of Dimes. She and her husband, Alex, an integration engineer with Boeing, have returned to St. Louis after living in Kansas. E-mail: teamewing @earthlink.net.

Ruth Hays, LW 98, recognized for her work in employee-benefits
First-Time Filmmaker Shows America Outside In

An epiphany struck Marlo Poras during her junior year at Washington University—that she wanted to pursue a career in documentary films. Poras, who had always loved the visual medium for its storytelling ability, recalls, “A little light bulb just came on.” Although the Boston native was majoring in history, she would be influenced further by film instructor Jill Petzall, who taught storytelling ability, recalls, “A little light bulb just came on.”

Poras documents Mai’s departure from cosmopolitan Hanoi only to be subsequently placed in rural Mississippi with an unemployed host family of self-proclaimed rednecks. The father (disabled), the mother (depressed), and daughter (introverted) become a family connection, heads to Detroit to work in a nail salon. The film ends with a shot of her—crestfallen, but hopeful—at the feet of an outlandish, fake blond, working on calluses and toes.

Poras, now 31, worked alone with her small digital video camera for two-plus years, shooting, producing, directing, writing, and editing more than 150 hours of Mai’s life, from Vietnam to Mississippi, New Orleans, and Detroit.

The response to Poras’ debut effort has been exceptional. The film aired nationally last August on P.O.V., PBS’ award-winning nonfiction showcase. Poras claimed Austin’s South by Southwest Film Festival Audience Award for Best Documentary and the International Documentary Association’s award for feature documentary, among others.

In retrospect, Poras says the film was a huge leap for her. “I was tested all the time, and I worried all the time. But at every stage of the process, I would meet my expectations.”

For her next film project, she is again looking at Southeast Asia, or perhaps Brazil, to create an intimate portrait of a person or people that explores everything from immigration to cultural identity and the like. New location perhaps, but same epiphany.

—Kenan Pollack, A.B. ’92
guests included several University alumni. In May 2002, Silverstein received a Master of Fine Arts from Cranbrook Academy of Art in Bloomfield Hills, Mich.

Alissa Smith, LW 00, who received a Master of Laws in securities regulation from the University of California at Los Angeles, said she was pleased to be employed by a large city firm.

"I am most excited about being part of a law firm that is large enough to have a dynamic practice in a variety of areas," she said. "I am looking forward to working with a diverse group of clients and developing my legal skills in a challenging environment."
In Remembrance

Leigh A. Doxsee

Leigh Arba Doxsee, A.B. '47, a lifelong resident of the St. Louis area, who served its communities, as well as Washington University, in many ways, died December 18, 2002, of lung cancer and heart disease at his home in Creve Coeur, Missouri. He was 78.

Doxsee strongly believed in and practiced public service. He had been a member of the Board of Aldermen for the City of Clayton, a member of that city's Plan Commission for 23 years, a member of the Parks and Recreation Commission for three years, and a member of the Plan Commission for Des Peres.

He served on Washington University's Public Relations Council, of which he was a founding member, and on the University's National Council for the George Warren Brown School of Social Work.

After serving in the U.S. Army and graduating from Washington University, Doxsee worked as a news writer, an editor, vice president of the Chamber of Commerce of Metropolitan St. Louis, and senior vice president of advertising and public relations for Mercantile Bancorporation.

He retired in 1988. Survivors include his wife, Joan; a son; two daughters; and four grandchildren.

Harold L. Rosenthal

Harold L. Rosenthal, professor emeritus of biochemistry and biomedical sciences, died October 25, 2002, of a pulmonary embolism. A resident of Creve Coeur, Missouri, he was 80.

Rosenthal, who earned a doctoral degree from Rutgers University, taught at several institutions before joining the University in 1958. He organized and served as chairman of the Department of Physiological Chemistry at the School of Dentistry.

His interests were varied, but he perhaps is best remembered for leading the analysis of 85,000 baby teeth—collected from children in the region—for strontium 90, a substance created by nuclear bomb tests in the United States. This internationally acclaimed Baby Tooth Survey determined that children were absorbing radioactive fallout from those tests, and that finding led to the adoption of a treaty in 1963 banning atmospheric bomb tests.

Rosenthal retired in 1987. Among survivors are his wife, Rose; five sons; two sisters; a brother; and four grandchildren.

Robert Brookings Smith

Robert Brookings Smith, a philanthropist, entrepreneur, retired bank executive, and trustee emeritus of the University, died in his sleep at his home in Ladue, Missouri, on December 30, 2002. He was 99.

Born in St. Louis, Smith attended Princeton University and, in 1928, became a partner in the brokerage firm of Smith, Moore & Co. in St. Louis. After serving in the U.S. Navy in World War II and being decorated for heroism, he returned to the brokerage firm, but in 1952, he became a limited partner in 1952. He then served as a financial adviser to Reconstruction Finance Corp. during its liquidation.

Smith joined Mercantile Trust Co. in 1936 as a vice president. He later became a board member and was elected vice chairman of the board in 1961. Later, Smith started two businesses—Cashex Inc. and National Cache Card, a firm that developed the use of magnetic strip credit cards for Washington University. He later sold both businesses.

Smith was an honorary trustee and a past vice chairman of the Board of the Brookings Institution in Washington, D.C., an institute founded by his great-uncle, St. Louis capitalist Robert S. Brookings, for whom Brookings Hall and Brookings Quadrangle at Washington University are named.

A past president and board chairman of many St. Louis organizations, Smith was a managing partner of Common Bond Associates of St. Louis, a research and development partnership, until his death in 1986. Survivors include his wife, Nancy; two daughters; and a grandson.

Edward G. Weltin, Sr.

Edward G. Weltin, Sr., a religious studies pioneer and professor emeritus of history in Arts & Sciences, died October 29, 2002, of lung cancer at his home in University City, Missouri. He was 91.

Weltin, a native of Quincy, Ill., joined the University faculty as an assistant professor in 1947. He taught Greek and Roman history, Western Civilization, and Early Christianity, and he was instrumental in the development of a religious studies program—one of the first in the nation. Weltin, who received the University's Distinguished Faculty Award in 1971, wrote two books, The Ancient Popes and Athens and Jerusalem.

In 1980, he retired, and, in 1986, his former students and colleagues helped establish the University's Edward G. Weltin Lectureship in Religious Studies. Survivors include three daughters, two sons, 12 grandchildren, and four great-grandchildren.
Carole Prietto planned to be a historian. As a student, she took every ancient and medieval history course she could. She wanted to teach history, imparting some of the passion she felt for the subject to students who were as eager to learn as she had been.

Now, instead of teaching history, Prietto preserves it. As the University archivist for the past 13 years, she has studied, nurtured, and helped increase a veritable treasure house of resources.

The Washington University Archives collects and maintains the University's permanent historical record, from 1853 to the present day, as well as a St. Louis history collection. The collections include manuscripts, prints, sound recordings, film, video, artifacts, and microfilm. In 1998, Prietto presided over the University Archives' move from cramped space in Olin Library to larger, climate-controlled facilities in the West Campus Library. More recently, she's been diligently helping the University prepare for its 2003-2004 Sesquicentennial celebration.

The theme of that celebration is "treasuring the past, shaping the future"—sentiments that echo Prietto's own.

"Some people tend to think of Archives as an attic full of memorabilia," she says. "But we're not just a place that collects quaint old stuff. We make information available, and we show you why it's important—not just for the study of the past but also in planning the future. You can't know where you're going until you know where you've been."

A member of the University's Sesquicentennial Commission, Prietto serves a pivotal role on several subcommittees, including those responsible for creating special exhibits, a Sesquicentennial Web site, a video, and a soon-to-be-published pictorial history book.

The most time-intensive project, by far, is the history book. Prietto has worked very closely with author Candace O'Connor for well over a year, researching photographs and digging up background information.

"Anything of this magnitude is not just another project," Prietto says. "Making information about the history of the
University available is my job. But the Sesquicentennial gives our archives an extra visibility. The history book will be around for a long time to come. That's something very tangible, and it's satisfying to know that I will have contributed to that."

Some faculty members are using the Sesquicentennial as an opportunity to weave University history into their curriculum. Prietto has been brainstorming with them to come up with topics that students can research through University Archives. In Professor Mary Ann Dzuback's course, History of Women in Higher Education and the Professions, for example, students are using archival materials to research the role of women in the development of Washington University.

"Faculty can and do use the collections in their teaching," Prietto says. "For instance, we have very strong collections in performing arts, so we work with faculty on projects that relate to campus theater. And we've worked with any number of students on their senior theses."

Students researching the civil rights movement and desegregation will have access to a scrapbook from 1948-1949 that documents the activism of a group called SCAN, Student Commission for the Admission of Negroes. (At that time, African Americans were only admitted to the University's graduate divisions.) About 25 pages from the fragile scrapbook have been digitized to be made available on the Web.

"We didn't have the money to do the whole thing," Prietto says. "I would love to get funds for more digitizing. Some of the artifacts are getting too fragile to handle, and I would like to make more of the collections available online. I have a number of competing projects, one of which is digitization of more artifacts in the collections. The other is preservation of our 16mm athletic films. We have football and basketball game films going back to the late 1940s, early '50s, and many of those are showing very obvious signs of rapid deterioration. That is a higher priority for me because those don't have much time left."

The extraordinary amount of research she has done in preparation for the Sesquicentennial has made her a much better resource for faculty and students, Prietto says.

"I've certainly learned an awful lot about our collections. I thought I knew them pretty well. Now I know them very, very well as a result of the Sesquicentennial, in particular as a result of the history book. In my role as photo researcher, I've called upon everything I could conjure up to piece together where to find this or that person. And a lot of fact checking has let me delve into things that I never would have delved into otherwise."

All of which only reinforces the high esteem in which she is held by her colleagues.

"There's such a steep learning curve in Carole's position," says Anne Posega, head of Special Collections at Olin Library. "It takes a lot of time and commitment and love of history to reach the level of knowledge that Carole has, and no one else at the University has that knowledge. There's no one who can fill her shoes."

Terri McClain is a free-lance writer based in St. Charles, Missouri.

Peer Review

"People are always amazed at how much Carole knows. It's as if the University for 150 years was her extended family, and she is the family expert on who did what when, and what really happened. She's an absolutely incredible source of information—in addition to her sense of organization, her knowledge of what we ought to be gathering, how we should be documenting the University, and what is of general interest. Once she knew that the University was planning for the Sesquicentennial, she made a concerted effort to get the archives in really good shape so that she could practically just reach in with her hand and pull out the information that was needed."

—Shirley Baker, Vice Chancellor for Information Technology and Dean of University Libraries

"Carole always has a great deal of enthusiasm for her work, and that's fun to be around. She is obviously a very instrumental person in the whole Sesquicentennial because she has the repository of information that people are using, and her knowledge of the University's history is so intimate and extraordinary that people have been relying on her for a lot of help."

—Mary Ellen Benson, Assistant Vice Chancellor and Executive Director of Publications

"Carole has always had an indispensable resource for the University for many years, but she has been especially important during the past year as we planned for our 150th anniversary. She has a wonderful and enlightened sense of history and institutional memory, and she has been generous with her time and expertise for many schools and departments planning Sesquicentennial programs and exhibits. I can't imagine planning this celebration without her."

—Steve Givens, Assistant to the Chancellor and On-Campus Coordinator of the Sesquicentennial Celebration

"Not only does Carole know the University's history and archival collections inside out, but she also has great enthusiasm for her work. All of that makes her a wonderful resource—Washington University is lucky to have her!"

—Candace O'Connor, Author

"I think Carole has been invaluable to a number of departments and planning groups for the Sesquicentennial because she has an almost encyclopedic knowledge of Washington University's history and resources. Her contribution is immense. She is the guide to the University's history, and a very knowledgeable one."

—Anne Posega, Head of Special Collections at Olin Library
Otherworldly  The Margaret Talbott Thomas Fountain, located on the north side of Brookings Hall, was donated in 1977. Thomas, who died in 1975, was a charter member of the Women’s Society, and her husband, the late Charles Allen Thomas, was a life trustee. As Washington University approaches its 150th anniversary in 2003–2004, the magazine will feature photos and stories of the people and places that are part of the University’s history.