MetroLink expansion proposals unveiled

The recent public unveiling of proposed expansion routes for the MetroLink light-rail system gave definition to the system's expansion agenda.

The January unveiling of the Cross-County Corridor Major Transportation Investment Analysis (MTIA) detailed 19 proposed combinations of MetroLink expansions and highway improvements organized by transportation corridors. Sverdrup Civil Inc., a St. Louis engineering firm, prepared the MTIA for the Missouri Department of Transportation and the East-West Gateway Coordinating Council, a regional planning organization.

Hundreds of area residents packed the Clayton Community Center on Jan. 22 to get their first looks at aerial photographs marked with proposed routes to extend Interstate 170 south of the parkway below Forest Park Parkway and then travel west along an existing right of way. Expansion plans are being considered for several reasons, including the overwhelming success of the existing MetroLink line and the area's overly burdened roadways, outdated highway interchanges and pollution-choked air.

Proposition M, approved by voters in 1994, established a quarter-cent sales tax in St. Louis and St. Louis County dedicated to paying for the operation and expansion of MetroLink. The tax was approved by 70 percent of voters in the county.

MetroLink now connects downtown St. Louis with Lambert-St. Louis International Airport to the northwest. Proposed expansions call for the creation of an east-west connector between downtown St. Louis and I-70 and a north-south route along I-170.

Expansion plans are being considered for several reasons, including the overwhelming success of the existing MetroLink line and the area's overly burdened roadways, outdated highway interchanges and pollution-choked air. Of these four routes, the one favored by the university would run west along Forest Park Parkway/Millbrook Boulevard from DeBaliviere Avenue to Clayton's Government Center and Central Business District, where the weekday influx of 30,000 commuters now creates major parking problems.

This route, the “north-of-the-park route,” starts at the Forest Park MetroLink station at DeBaliviere. As proposed by Sverdrup, the route would cross under Forest Park Parkway and then travel west on the south side of the parkway below grade along an existing right of way.

Eventually, the station would add more shows, including broadcasts of sporting events, talk shows and other programs developed and produced by students.

“Right now, we just don’t have the equipment or the time to expand in a big way,” Pogach said. “This is very time-consuming, and we can only do so much.”

Last fall, Pogach and junior Steve Lewis, WUTV's general manager, traveled to San Diego to record for WUTV the frenzy of activity surrounding the presidential debate held there.

Continued on page 7
Van Essen says mechanical tension might shape brain

D avid C. Van Essen, Ph.D., the Edison Professor of Neurobiology and head of the Department of Anatomy and Neurobiology, says a developing infant’s brain folds into a compact shape perhaps because the brain cells behave like rubber bands.

In the Jan. 23 issue of the journal Neuron, Van Essen presented the idea that mechanical tension might shape the brain. The journal publishes hypothesis papers about once a year to spotlight innovative concepts.

“There’s a vast literature on how brain cells migrate and establish connections,” Van Essen said. “But questions about how the brain attains its distinctive shape have received much less attention from neuroscientists.”

A mammal’s brain has a thin outer sheet, the cerebral cortex, wrapped around an inner core of subcortical structures. The human cortex, involved in thinking in other cognitive tasks, is the size of a 16-inch pizza. It fits inside the skull because it is highly convoluted instead of smooth. So why, Van Essen wonders, is the cortex convoluted in some animals such as humans, apes and whales but perfectly smooth in others such as mice and rats? And what transforms the smooth cortex of a human fetus to a structure that resembles crumpled newspaper by the time the baby is born?

“Previous speculations about cortical folding have tended to focus on differential growth and differential migration of cells — an outward fold or bulge in the cortex was thought to be a place where there was extra cell growth,” Van Essen said. “The underlying idea was that some neurons are programmed to proliferate more exuberantly than others.”

Van Essen said the brain may need to require a detailed genetic manual to reach its final shape even though cells in various parts do express different genes.

Instead, he proposes that cortical folding relates to the pattern of long-distance connections between different parts of the cerebral cortex. These connections are made by axons — long “wires” that enable nerve cells to communicate with one another. In many parts of the brain, large numbers of axons or other elongated, gel-like cell parts run in the same direction, like strings on a guitar. If these neuronal strings are under tension, they would try to contract, like a rubber band on a slingshot contracts when the tension is released. Indeed, Steve Heidemann and colleagues at Michigan State University in East Lansing have shown that axons of isolated neurons growing in a dish do generate considerable tension.

As bundles of axons establish connections with other parts of the brain, they could pull the interconnected regions closer together, Van Essen suggests. So the intervening tissue would crumple into a fold, as strings under tension would crumple a guitar neck that was pliable instead of rigid.

Van Essen, who has studied the brain’s visual system for more than 20 years, developed his idea while thinking about the two largest components of the visual cortex, areas V1 and V2, which are strongly interconnected. The cortex folds so that V1 and V2 are particularly close together in the mature brain, even though they are more widely separated early in development, when the cortex is flat. “Other investigators, particularly Christopher Cherniak at the University of Maryland, have suggested that different parts of the brain are placed so that total wiring length is as short as possible,” Van Essen said.

Given that notion, Van Essen realized that the proximity of areas V1 and V2 is a good example and that mechanical tension is a simple and efficient mechanism for attaining this outcome. “Later, I realized the hypothesis could be readily extended to the brain in its entirety. For example, theaccordion-like folding of the cerebellum can be explained by its unique pattern of interneuronal connections,” he said.

So why does the cerebral cortex remain flat in some animals? “Species with small brains have a cerebral cortex that’s just big enough to wrap around the subcortical structures,” Van Essen said. “In this case, the tendency to fold would be opposed by hydrostatic pressure from the internal structures, just as pressure inside a balloon prevents wrinkling. Folding occurs when the cortex grows sufficiently large that it wraps only loosely around these internal structures.”

A clinical condition called hydrocephalus supports this explanation. When cerebrospinal fluid cannot escape from the brain through its normal exit, it enlarges the fluid-filled ventricles within the brain. This hydrostatic pressure forces the brain to expand, and the cortex fails to fold normally.

Another relevant observation comes from Pasko Rakic’s group at Yale University and colleagues in Japan. Through experiments on transgenic mice, the researchers interfered with the process that prunes surplus cells in the developing brain. The cerebral cortices of the mice were wrinkled instead of smooth. The retina also was crumpled. “These observations suggest that extra neurons in the cortex and retina alter the balance of forces and allow folding to occur,” Van Essen said.

Van Essen’s hypothesis also can explain both the consistency and variability of people’s brains. “Consistent folding should be the rule where there are only a few major pathways that dictate the pattern,” he said. “But in other regions, there may be a more even, balanced competition among the hundreds of specific pathways that interconnect cortical areas. In one person, a slightly stronger pathway or slightly larger cortical area may tilt the balance toward one pattern of folding, whereas another individual with a slightly weaker pathway may progress toward a completely different folding pattern at that part of the cortex.”

Van Essen noted that his idea can be tested with computer models as well as with collections of experimental studies. “This hypothesis is attractive because it can explain the distinctive shapes of many different structures in the central nervous system,” he said. “But it needs to be tested as critically as possible in a case-by-case situation.”

— Linda Sage

Studying hip fractures

Exercise technicians Judith Gordon, right, instructs Faye Jackson in weight training for a study to determine if a specialized exercise program can prevent or minimize disability from hip fractures. Volunteers 78 and older who have sustained hip fractures within the past three months are needed. For more information, call Nancy Shelley at (314) 286-2710.

Dwight Towler chosen as a 1996 Culpeper scholar

The Charles E. Culpeper Foundation has chosen Dwight A. Towler, M.D., Ph.D., a Washington University School of Medicine Medical Science Scholar. Towler is an assistant professor of molecular biology and pharmacology and of medicine and is a faculty member in the Division of Bone and Mineral Research.

The Culpeper Foundation helps develop the careers of young academic physicians by providing research funds of $100,000 per year for as many as three years.

Towler studies the production of proteins by bone cells called osteoblasts. “More than a quarter-million American suffer hip fractures every year,” he said. “Most of them have osteoporosis. If we can obtain a better understanding of how normal osteoblasts regulate bone quantity and quality, we may be able to prevent fractures by promoting these processes in high-risk individuals.”

Towler has cloned the gene for a major bone protein called osteocalcin and is unraveling the details of its regulation by bone growth-promoting factors. With the Culpeper funds, he will continue to identify small peptide growth factor signals and alter the activities of genes involved in bone production.

The private Culpeper Foundation was established in 1978 by the late Charles E. Culpeper, one of the early pioneers in the bottling and marketing of Coca-Cola. The foundation received nominations for the 1996 scholarships from about 50 U.S. medical schools.
I

in his 30 years at Washington University, Phillip L. Gould, Ph.D., the Harold D. Jolley Professor and chair of the Department of Civil Engineering, has made great strides in keeping the department and the university on firm footing.

During those three decades, Gould has made impor-
tant contributions to engineering design and earthquake engineering. In the 1970s, he became interested in the earthquake hazard in the St. Louis region and, with other engineers and researchers, was instrumental in ensuring the enforcement of the earthquake building code for new buildings in the city of St. Louis and St. Louis County.

Gould's efforts led to the strengthening of the code and have changed the way architects and builders design and construct new buildings, particularly critical ones such as schools, hospitals and fire stations. He helped guide St. Louis to the risks facing nearly 500,000 buildings and bridges in the event of an earthquake of 6.0 or more on the Richter scale.

His emphasis when he joined the faculty in 1966 was the design of thin-shell, hyperbolic cooling towers — 600-foot-tall structures that cool and recycle water from nuclear and other power plants. One flaw in the design of such a fragile structure could result in disaster. In designing hyperbolic cooling towers, he was one of the first engineers to use finite element analysis — the computerized process of subdividing an object into a mesh of elements and computing the stresses and deformations they undergo under certain conditions — all to make a stron-
ger, safer and more economical structure.

Gould has chaired the civil engineering department since 1978, guiding the School of Engineering and Applied Science's smallest department toward the same teaching and research level as its counterparts at Purdue University in West Lafayette, Ind.; the University of Illinois in Urbana-Champaign; and the Massachusetts Institute of Technology. He has taught hundreds of undergraduate and graduate students the principles of structural and engineering design — developing innovative and efficient teaching methods involving close interaction with area engineers.

"It is so rewarding that our department is recognized as certainly the best civil engineering department in Missouri and on the same footing as places such as Purdue and Illinois," Gould said. "Achieving that recognition has taken a lot of drive and commitment on the part of our faculty, staff and administration."

"I'm proud that our department is recognized as certainly the best civil engineering department in Missouri and on the same footing as places such as Purdue and Illinois."

"At that point, the code had provisions for earth-
quake design, but the city and county were operating under an exclusion clause that allowed them to ignore that provision because there had been no historical record of damage from an earthquake," Gould said. "A valuable impetus to our efforts was the work of the late Otto Nuttli, a geophysicist at Saint Louis University who had alerted the community of impending damage from an earthquake. But he'd gotten little reception from the political community. I became allied with the proponents of code changes, and — with the St. Louis section of the American Society of Civil Engineers — we formed a committee to work on the problem. It took nearly a decade, but we got both the city and county to unanimously endorse the change." Gould said the regional earthquake risk should be kept in perspective. "I think the public knows that the earthquake hazard here is not the most serious day-to-day problem that the community faces, but it is one of those problems that has a certainty. It's not 'if' but 'when.' Fortu-
nately, we may have a long time to prepare for it," he said. "The average turnover in building stock is about 2 percent, so in 50 years we may reap the full benefits of the work done by the professional community." Gould's involvement in earthquake issues led to his 1993 election as a national director of the Earthquake Engineering Research Institute, one of the first Midwest engineers so elected. He now serves as vice chair of the Missouri Seismological Safety Commission, which reports to the state Legislature. And Gould is excited by the possibility of participating in a Midwest earthquake engineering research center involving the University of Illinois, Washington University and other leading universities. There are currently only one such research center in the nation — at the State University of New York at Buffalo. The proposed center, Gould said, would have a Midwest orientation and would focus on structures at risk in this region.

Colleagues such as Douglas A. Foutch, Ph.D., professor of civil engineering at the University of Illinois, speak glowingly of Gould. "Phil is one of the brightest people I know in struc-
tural engineering," said Foutch, who was the seismic design consultant for the new casino and bridge over the Mississippi River at Alton, Ill. "His work on shell structures is known around the world. St. Louisers have much better shape regarding earthquake-hazard reduc-
tion than most cities in the Midwest, in part because of Phil's efforts."

Department adapts to students' needs

The University's civil engineering department concen-
trates on more than just earthquake engineering. Materi-
als research, environmental engineering, construction manage-
ment are three strong areas, in addition to structural design.

Master's degree programs offered by the depart-
ment are innovative and designed professionally oriented full- or part-time students. One program offers a master's in structural engineering with an emphasis in earthquake engineering. The department also offers advanced courses for graduate students and practicing engineers under a 10-hour program leading to a certificate in earth-
quake engineering. The certificate program is believed to be the first of its kind in North America.

Another program offered by the depart-
ment is the master's in construction manage-
ment, which was started by Gould in the 1980s. Though awarded by the civil engineering department, the degree is in construction manage-
ment — not engineering — and appeals to people with business, urban planning and architecture backgrounds, as well as engineers.

"The construction-management program shows that the School of Engineering and Applied Science can offer degrees that address the professional needs of students who are not engineers," Gould said. "In designing these programs, we've recognized that the master's degree in many cases is a transition program rather than the first step toward a doctorate."

In addition to teaching graduate courses in analysis of shells and structures, Gould regularly teaches "CE 341," the first professional course in structural engineering for juniors, and "CE 467," an advanced structural-design course for undergraduates. In the latter, Gould coordinates the design projects by putting students in teams that use state-of-the-art equip-
ment and computer programs to design a substantial bridge or building. He calls upon St. Louis engineers, often University civil engineering alumni, to serve as practical guides. "Our students get lots of contact with practicing pros who are right on our doorstep," Gould said. "We couldn't run this kind of program if we were located in the country or in a mega-city like Chicago or New York. That's a distinct advantage of being in a mid-sized urban area."

Gould particularly is interested in international cooperative research and student-exchange programs. Spurred by a 1974-75 sabbatical grant as an Alexander von Humboldt Foundation Senior U.S. Scientist in Germany, he has visited and lectured at leading institutions in Europe, Asia and Australia. Recently, he has worked to establish a study abroad program that enables University undergraduates in engineering to spend their junior year at universities in one of the 20 countries where students from those universities come here.

Gould and his wife, Deborah, who holds a master's degree in library science from the University, have four children. Three of the children are currently enrolled in graduate programs at universities while students from those universities come here.

Gould and his wife, Deborah, who holds a master's degree in library science from the University, have four children. Three of the children are currently enrolled in graduate programs at universities while students from those universities come here.
"Abstract Expressionism: American Art in the 1950s and 60s." A collection of 30 works by 22 artists representing the "New York School." Through April 6. Gallery of Art, upper gallery, Steinberg Hall. Hours: 10 a.m. to 4 p.m. weekdays; noon to 5 p.m. weekends. 935-4523.

Arts Connection/City Faces exhibits. Features works by participants in City Faces, a supplementary training program for at-risk youths. Through March 29. Center Of Contemporary Arts, 524 Trinity Ave. 725-6555.

"The Last Time I Saw Paris: A City in Time." A Department of Special Collections exhibit. Through March 21. Special Collections, Hillman Library. Hours: 8 a.m. to 11 p.m. weekdays; noon to midnight weekends. 935-3495.

"The Lens of Architecture: Ronchamp and Illinois." Photographs by 20th-century photographer Lucien Lerve. Through March 30. Gallery of Art, lower gallery. Hours: 10 a.m. to 4 p.m. weekdays; noon to 5 p.m. weekends. 935-5495.

Cinema

"Alice Doesn't Live Here Anymore." Man." Room 219 South Ridgley Hall. 6 p.m. Chinese Film Series.

7 and 9 p.m. Filmboard Classic Series. "Fargo." (Also Feb. 15, same times, in Center for Earth and Environmental Sciences).

The deadline for all entries is noon Tuesday, Feb. 18. Entries should state time, place, date, sponsor(s), the title of event, number of entries, description and admission cost. Quality promotional photographs with descriptions are welcome. Send items to Judy Roland at Campus Box 1700 or via fax to (314) 935-4259. Submission forms are available by calling (314) 935-4928.

Calendar guidelines

Events sponsored by the University -- its departments, schools, centers, organizations and recognized student organizations -- are published in the Calendar. All events are free and open to the public, unless otherwise noted. Callers interested in reserving time, date, place, sponsor(s), title of event, number of entries, description and admission cost. Quality promotional photographs with descriptions are welcome. Send items to Judy Roland at Campus Box 1700 or via fax to (314) 935-4259. Submission forms are available by calling (314) 935-4928.

The deadline for all entries is noon Tuesday, Feb. 18. Entries should state time, place, date, sponsor(s), the title of event, number of entries, description and admission cost. Quality promotional photographs with descriptions are welcome. Send items to Judy Roland at Campus Box 1700 or via fax to (314) 935-4259. Submission forms are available by calling (314) 935-4928.

The deadline for all entries is noon Tuesday, Feb. 18. Entries should state time, place, date, sponsor(s), the title of event, number of entries, description and admission cost. Quality promotional photographs with descriptions are welcome. Send items to Judy Roland at Campus Box 1700 or via fax to (314) 935-4259. Submission forms are available by calling (314) 935-4928.

The deadline for all entries is noon Tuesday, Feb. 18. Entries should state time, place, date, sponsor(s), the title of event, number of entries, description and admission cost. Quality promotional photographs with descriptions are welcome. Send items to Judy Roland at Campus Box 1700 or via fax to (314) 935-4259. Submission forms are available by calling (314) 935-4928.

The deadline for all entries is noon Tuesday, Feb. 18. Entries should state time, place, date, sponsor(s), the title of event, number of entries, description and admission cost. Quality promotional photographs with descriptions are welcome. Send items to Judy Roland at Campus Box 1700 or via fax to (314) 935-4259. Submission forms are available by calling (314) 935-4928.

The deadline for all entries is noon Tuesday, Feb. 18. Entries should state time, place, date, sponsor(s), the title of event, number of entries, description and admission cost. Quality promotional photographs with descriptions are welcome. Send items to Judy Roland at Campus Box 1700 or via fax to (314) 935-4259. Submission forms are available by calling (314) 935-4928.

The deadline for all entries is noon Tuesday, Feb. 18. Entries should state time, place, date, sponsor(s), the title of event, number of entries, description and admission cost. Quality promotional photographs with descriptions are welcome. Send items to Judy Roland at Campus Box 1700 or via fax to (314) 935-4259. Submission forms are available by calling (314) 935-4928.
Miscellany
Call for abstracts. The second annual Graduate Student Research Symposium is seeking abstracts in biological sciences, humanities, physical sciences, social sciences and professional degrees and student issues. The symposium will be held March 22. Abstracts due are Feb. 13 and should be mailed to: Research Symposium, Graduate Student Senate, Washington University, 6300 Brookings Drive, St. Louis, MO, 63130. Abstracts also may be attached to e-mails and sent to gssartsci.wustl.edu. Call 935-7755 for more info, or access the symposium home page at http://www.gssartsci.wustl.edu/gss.

Cultural Celebration. A weeklong series of events organized by the Campus Y to highlight cultures represented in the University and St. Louis communities. Events will be held Feb. 16-22, beginning with the Black Anthology program (see story on this page.)

Registration is open for the Following Office of Continuing Medical Education seminars: "Twenty-third Edition — Medical Review" (weekly sessions held Feb. 24 through May 19) and "New Approaches to the Management of HIV Disease: Update From the Fourth Conference on Acquired Immunodeficiency Syndrome" (March 22). 362-8892.

Saturday, Feb. 15


1 p.m. Reading. Poet and translater Michael Hofmann will read from his works. Cost: $5; free for students and senior citizens; and philanthropic donors. For information, call 368-2720.

Saturday, Feb. 22
7:30 a.m. Office of Continuing Medical Education seminar: "Alzheimer's Disease — Recent Developments in Diagnosis, Pathogenesis and Treatment" — The Ruth Mitchell, Clayton. 362-6891.

Friday, Feb. 21

Tuesday, Feb. 18

7 p.m. Book arts workshop. To commemorate February as Black History Month, the Washington University Department of Art and Art History and Arts and Education will offer a workshop featuring an introduction to book arts and making of a leather-bound book of your own design.

Registration is open for the following Office of Continuing Medical Education’s "Twenty-third Edition — Medical Review" (weekly sessions held Feb. 24 through May 19) and "New Approaches to the Management of HIV Disease: Update From the Fourth Conference on Acquired Immunodeficiency Syndrome" (March 22). 362-8892.

Vienna Fest 1997
"Biedermeier in Austria, 1815-1848." Exhibit includes photographic reproductions of art from 1815 to 1848. Through Feb. 21. Dept. of Music class room. Hours: 9 a.m.-5:30 p.m. to 7 p.m. weekdays. For weekend hours, call 935-4841.

Men’s basketball falls two games out of first
Washington University, the two-time defending University Association for (UA) men’s basketball champ, lost its first game since losing 73-69 at the University of Rochester (N.Y.) on Friday, Feb. 7. A three-game winning streak came to an end at 69-68 lead, but WU was unable to hold on for the win.

The loss was the Bear’s second setback in as many weeks. Junior Brad Borgman led WU with a team-high 15 points, but the squad shot only 38.2 percent from the field.

Both games this week will be UAA contests. This week: 8 p.m. Friday, Feb. 14, vs. Rochester (N.Y). On Monday, Feb. 10, the Bears play at Trine University, Angola, Ind. Both are UAA contests.

"Blood on the Fields," which is about slavery, will be performed on Feb. 12 at 8 p.m. in the Roger R. T. Takaki, Ph.D., professor of ethnic studies at the University of California at Berkeley, will be a proponent in the culture, anthropology, journalism and sociology departments at New York University. He has written seven books, including "The Sixties: Years of Hope, Days of Rage" and the novel "The Murder of Albert Einstein." His most recent work, "The Twilight of Common Dreams: America's War with the World," examines how the fundamental problems of inequality and racial discrimination often are overlooked by activists of identity politics who would use the Civil Rights Movement as an example.

Marsalis is a columnist for the New York Times, the Los Angeles Times, the Boston Globe. He is on the editorial board of The Washington Post and the Boston Globe. He is the author of several books, including the most recent, "The Twilight of Common Dreams: America's War with the World." He is also the recipient of a Democra tic Society (SDS) from 1963-64. From 1964-65, he was the first program at Berkeley for 16 years before joining the Washington University faculty.

For more information about the lecture, call (314) 935-5285.

Musician Wynton Marsalis to deliver keynote address in Cultural Celebration

Jazz and classical trumpet player Wynton Marsalis will deliver an address in "Friday Evening Recita tion Through Sacrifice: The Legacy of American Slavery" at 11 a.m. Feb. 21 in Graham Chapel. This is the keynote address of the Cultural Celebration, a weeklong series of events designed by the Campus Y to highlight the cultures represented in the Washington University and St. Louis communities. The Cultural Celebration begins Sunday, Feb. 16, with the Black Anthology program titled "Black Comedy: Lessons from a Life in the Margins." For information about the Cultural Celebration events include:

- "Taste of the World" featuring free samples of cultural cuisine from 5 p.m. to 7 p.m. Monday, Feb. 17, in The Gargoyle in William邦Lea’s Place in the Wohl Student Center; and
- "Americas Night" from 8 p.m. to 2 a.m. Feb. 17 in The Gargoyle.

For more information about Marsalis and other events, call 362-1437. For information about the Cultural Celebration, call (314) 935-5010.

Black Anthology program features prose, music

To commemorate February as Black History Month, a program of prose and music titled "Black Comedy: Laughing to Keep From Crying," will be held at 7 p.m. Sunday, Feb. 16, in Edison Theatre. This Black Anthology event is part of the weeklong Cultural Celebration. (See story above.) The program features performances by Washington University African-American students and works by poet Langston Hughes, "Miss "Moms" Mailey," author Julius Lester and playwright George C. Wolfe.

Black Anthology program features prose, music

To commemorate February as Black History Month, a program of prose and music titled "Black Comedy: Laughing to Keep From Crying," will be held at 7 p.m. Sunday, Feb. 16, in Edison Theatre. This Black Anthology event is part of the weeklong Cultural Celebration. (See story above.) The program features performances by Washington University African-American students and works by poet Langston Hughes, "Miss "Moms" Mailey," author Julius Lester and playwright George C. Wolfe.

Black Anthology program features prose, music

To commemorate February as Black History Month, a program of prose and music titled "Black Comedy: Laughing to Keep From Crying," will be held at 7 p.m. Sunday, Feb. 16, in Edison Theatre. This Black Anthology event is part of the weeklong Cultural Celebration. (See story above.) The program features performances by Washington University African-American students and works by poet Langston Hughes, "Miss "Moms" Mailey," author Julius Lester and playwright George C. Wolfe.

Wind Ensemble to salute armed forces veterans

"For Heroes Lost and Fallen," a concert paying tribute to veterans, will be held at 7 p.m. Sunday, Feb. 16, in The Saint Louis Art Museum Auditorium. Under the direction of Dan Presgr, lecturer in music in Arts and Sciences, the Wind Ensemble will perform music inspired by military themes. The second half of the concert will feature the Jazz Band of Scott Air Force Base, located near Belleville, Ill. The concert is free and open to the public.

Two years ago, the Wind Ensemble performed a concert with a similar theme. Presgr, a former trumpet player from the St. Louis area who served in Vietnam, said he would like to present another concert that will help remind people of the sacrifices veterans have made for the country.

The program includes the official march of the American Legion, "An American Creed." "For Heroes Lost and Fallen," a piece written by David Ginsburg inspired by the Vietnam War Memorial. "Fireworks," a piece written by Stephen Bulla in commemoration of Desert Storm; and a medley salute to the U.S. armed forces.

For information, call (314) 935-5811.
Acoustic musicians Grisman, Bresler to heat up Edison

T he winter ice will melt into a flow of notes when some of the hottest acoustic music this side of Kiev (Grisman) and Los Angeles (Bresler) come to town. February 21 and 23, the St. Louis Hillel Center will host a performance of Jewish klezmer—mandolinist and clarinetist Fishel Bresler and mandolinist David Grisman. This performance is sold out.

At 8:30 p.m. February 21 in an eclectic performance that will weave a rich musical tapestry, ranging from country-western and bluegrass to ragtime-flavored and Eastern European klezmer music, Grisman and Bresler (the latter also an accomplished violinist) will perform selections from their latest album, Songs of Our Fathers. The album is the third major collaboration between Grisman and Statman. The album is the third major collaboration between Grisman and Statman. The album is the third major collaboration between Grisman and Statman.

Grisman is a native Californian who created his own name. Since 1975, he has toured the world and has performed on more than 100 albums, including many of his own. His talents have been called upon by stars such as Linda Ronstadt, Dolly Parton, Joni Mitchell and the late Jerry Garcia. But Grisman has made an even greater mark in the musical world with his own work, forging new directions and pushing the boundaries of acoustic string-band music. Grisman performs with Matt Eakle on flute, Jim Kerwin on bass, Enrique Coria on guitar and Joe Craven on violin, mandolin and percussion. In 1990, Grisman founded the independent record label Acoustic Disc. He has worked with Matt Eakle on flute, Jim Kerwin on bass, Enrique Coria on guitar and Joe Craven on violin, mandolin and percussion. In 1990, Grisman founded the independent record label Acoustic Disc. He has worked with Matt Eakle on flute, Jim Kerwin on bass, Enrique Coria on guitar and Joe Craven on violin, mandolin and percussion. In 1990, Grisman founded the independent record label Acoustic Disc.

Grisman and Bresler—a long-time apprentice and protege of Statman—recently shared the stage in a California performance of “Songs of Our Fathers.”

Students essential to WUTV’s success— from page 1

WUTV’s initial goal is to build an awareness among students of its presence. Lewis said. Eventually, he would like to see the station grow into its own studio space and have a strong support staff. “We want to incorporate as many students as we can,” Lewis said.

To find the support staff to operate the station, WUTV staffed a Student Activities Fair. The booth attracted the interest of about 30 people. The good news, Pegash said, is that to train them to run all aspects of the station—the promotions of the station—both behind the scenes and on the air.

Currently, a number of students demonstrated their on-air charisma in a series of screen tests. One of the students, sophomore Deborah Winikoff, said she became interested in television after working as an intern last summer for the FOX network. “It would be fun to do this here,” she said.

Winikoff rehearsed the news script she used for the test and then sat down in front of the camera. The lights clicked on, and— with a smile—she began to read the news. After two takes and a few garbled words, she stepped out of the bright lights. “I was nervous,” she said.

Pegash, who plans to pursue a career in television journalism, said it takes a while for people to feel comfortable in front of a camera. He said WUTV is looking for people who come off well on camera. “What we are looking for is a good friend, someone you can talk to,” he said.

Freshman Justin Forer, who is in charge of producing the news, knows the TV business and knows what works. He started a station at his high school in Miami, Fla., and has worked as an intern for NBC. He said WUTV can provide exposure to students who would like to see the station grow into its own studio space and have a strong support staff. “I was nervous,” she said.

Pegash, who plans to pursue a career in television journalism, said it takes a while for people to feel comfortable in front of a camera. He said WUTV is looking for people who come off well on camera. “What we are looking for is a good friend, someone you can talk to,” he said.

Forer, who is in charge of producing the news, knows the TV business and knows what works. He started a station at his high school in Miami, Fla., and has worked as an intern for NBC. He said WUTV can provide exposure to students who would like to see the station grow into its own studio space and have a strong support staff. “I was nervous,” she said.

Pegash, who plans to pursue a career in television journalism, said it takes a while for people to feel comfortable in front of a camera. He said WUTV is looking for people who come off well on camera. “What we are looking for is a good friend, someone you can talk to,” he said.

Forer, who is in charge of producing the news, knows the TV business and knows what works. He started a station at his high school in Miami, Fla., and has worked as an intern for NBC. He said WUTV can provide exposure to students who would like to see the station grow into its own studio space and have a strong support staff. “I was nervous,” she said.

Pegash, who plans to pursue a career in television journalism, said it takes a while for people to feel comfortable in front of a camera. He said WUTV is looking for people who come off well on camera. “What we are looking for is a good friend, someone you can talk to,” he said.

Forer, who is in charge of producing the news, knows the TV business and knows what works. He started a station at his high school in Miami, Fla., and has worked as an intern for NBC. He said WUTV can provide exposure to students who would like to see the station grow into its own studio space and have a strong support staff. “I was nervous,” she said.

Pegash, who plans to pursue a career in television journalism, said it takes a while for people to feel comfortable in front of a camera. He said WUTV is looking for people who come off well on camera. “What we are looking for is a good friend, someone you can talk to,” he said.
The Record

For The Record contains news about a wide variety of activities and services of student scholars and professional activities.

Of note

Laura J. Bierut, M.D., instructor in psychiatry, received a $681,674 five-year grant from the National Institute on Alcohol Abuse and Alcohol Dependence for her project titled "Modification of the Immune Response by the Liver." This work will continue to explore the liver's role in the immune response.

Brian K. Dieckgraefe, M.D., Ph.D., instructor in gastrointestinal and general surgery, received a $400,000 three-year grant from the American College of Surgeons/Institute for Digestive Health (GIDH) to pursue work in basic medical research. Dieckgraefe is one of 25 researchers to receive one-year grants from the GIDH Research Council, which began in 1992 as a means of providing young scientists and educators with support for research in gastrointestinal and liver diseases. . . .

M. Wayne Fye, M.D., Ph.D., professor of surgery and of molecular microbiology, received a three-year, $890,000 four-year grant from the National Institutes of Health and the National Institute of Diabetes and Digestive and Kidney Diseases for a project titled "Modification of the Immune Response by the Liver." This work will continue to explore the liver's role in the immune response.

Tsay-Jong Tarn, D.Sc., professor of systems science and mathematics, has been honored with Distinction Member status by the Control Systems Society of the Institute of Electrical and Electronic Engineers (IEEE) because, according to the University's Center for Robotics and Automation, he is "one of the highest career awards bestowed upon IEEE members -- last December.

On assignment

Harold Blumenfeld, professor emeritus of music in Arts and Sciences, recently presented the world premiere of two of his recent compositions. The first, "Voci Luminose" for two violins and orchestra, received its premiere Sunday night by the Urval Symfoni Orkester in Sweden. The second, "O' Fouquet de la fureur et teneur with flute, clarinet, viola and cello, received its premiere Friday, Aug. 15 at the Patricia Cohett Theater in Cincinnati. In addition, Blumenfeld and "Voci Luminose" were featured on a nationwide TV program in Sweden.

Terri L. Griffith, Ph.D., assistant professor of organizational behavior in the John M. Olin School of Business, recently was appointed chair of the Organization Science Winter Conference. She also was named a senior editor of the journal/organization Science.

Guidelines for submitting copy

Send your full name, complete title(s), department(s), phone number and highest earned degree(s), along with a typed description of your noteworthy activity, to For The Record, c/o David Moosner, Campus Box 1070, or 762-4556.usw@wustl.edu. Items must not exceed 75 words. For information, call Moosner at (314) 935-2529.

Neighboring communities favor 'north-of-the-park route,' survey finds

before Pershing Avenue, where the route would enter a tunnel under Forest Park Parkway. The route would continue into Clayton, Government Center and Central Business District and then connect to a proposed new MetroLink line running north-south along I-170.

Sverdroup has proposed stops along this route at Skinker and at Big Bend. The University will provide right of way on its property for the rail line along the northern edge of the Hilltop Campus under the following conditions:

1. MetroLink must run below grade on the campus and at major intersections so that there will be no automobile and pedestrian access to and from Forest Park Parkway can be maintained.

2. MetroLink must not adversely affect the appearance of the campus and the surrounding neighborhood. The University will try to improve the appearance of the northern boundary of the campus so that it will be better designed and constructed. Improvements will include beautification efforts, such as landscaping.

3. MetroLink operation will not disrupt campus and neighborhood activities and the day-to-day life of the surrounding community.

4. Any MetroLink stop at the Hilltop Campus will be designated as a "walk-on" stop and not a "park-and-ride" stop.

A public-opinion survey of residents in University City, Clayton and the Central West End found that 88 percent of residents favor an underground route. The poll was conducted by Antone Research Co. (ARC) of St. Louis in late November and early December of 1996 at the request of Neighbors for Metrolink, a group advocating the "north-of-the-park" route.

Concern over the proposed expansion has been voiced by some residents who are worried about property values, construction costs, noise and the loss of private property.

M. Fredric Volkmann, the University's vice chancellor for public affairs, said the University shares its neighbors' interest in protecting the integrity of the area. "Strong and stable neighborhoods are vital to the community and vital to the quality of life and property values," Volkmann said. "As the neighborhoods, so goes the University."

A recent review conducted for Neighbors for Metrolink by Northside Planning showed that residents have concerns over noise, construction costs and potential for substantial value losses. This information from the survey was used as the foundation for a community meeting at the University on Feb. 13. At this meeting, a majority of the community members indicated support for the "park-and-ride" option.

Where the street has two names

Like so many streets in St. Louis, the road running along the northern edge of Washington University's Hilltop Campus changes names in the span of an intersection.

While the name of the street south of Millbrook Boulevard varies from the University's board from 1895 to 1928, and David L. Millar, University City mayor from 1933-37. The street officially was named "Millbrook Boulevard" in March 1941.

PROPOSED METROLINK EXPANSION ROUTES

Here is a brief look at the four proposed MetroLink expansion routes in the east subcorridor:

1. The proposed route known as the "north-of-the-park route" starts at the Forest Park MetroLink stop at Delbouvier Avenue and runs west along Forest Park Parkway/Millbrook Boulevard to Clayton's Government Center and Central Business District. Estimated cost: $170 million to $234 million. Washington University favors this route.

2. The proposed route known as the "Highway 40 route" starts at the Euclid Avenue MetroLink stop near the School of Medicine, runs south to Oakwood Avenue and then west along Highway 40/Interstate 64 to a point near the Saint Louis Galleria, with a spur into Clayton. Estimated cost: $351 million to $407 million and the loss of 5 homes and businesses.

3. The proposed route known as the "through-the-park route" starts at Euclid Avenue MetroLink stop and runs south along the edge of Forest Park before entering a tunnel directly under the park from southwest to northwest, coming out of the intersection of Skinker Boulevard and Forest Park Parkway/Millbrook Boulevard. The route continues west into Clayton's Central Business District. Estimated cost: $364 million to $412 million.

4. The proposed route known as the "Skinker route" starts at the Euclid Avenue MetroLink station and continues west along the south edge of Forest Park before turning north up Skinker Boulevard and the Forest Park Parkway/Millbrook Boulevard intersection, the route turns west and heads into Clayton's Central Business District. Estimated cost: $364 million to $412 million.

The Coordinating Council analyzed a 1996 impact study by the National Research Council and found that light rail transit also increases the value of commercial real estate.

Such findings do not surprise Tom Shrest. "It's because it improves a person's options and access in transit," said Shrest, executive director of Citi- zens for Rail Expansion of St. Louis (CERSA), the advocacy group.

Shrest also is a member of the Cross-Corridor Corridor Management Study Group, which will make recomm- endations to the East-West Gateway Coordinating Council's board. The board, made up of officials of regional city and county elected offi- cials, is expected to decide on MetroLink expansion proposals soon.

The "north-of-the-park route" is the least expensive and the shortest of the four proposed routes in the east subcorridor. Its estimated cost is between $170 million and $234 million. At its most expensive, this route would cost $100 million less than the least esti- mated for any of the other three proposed alignments serving the same destinations.

As part of the MITA, engineers at Sverdroup studied the effects this line would have on noise levels. Using a worst-case scenario -- a ground-level train running at peak travel hours with no sound barrier -- the noise level measured in back yards was estimated to be increased by more than two decibels, said Joe Leindecker, deputy director of the study.

At any distance, it takes an increase of at least three decibels for a person to receive a change in noise, Leindecker said. For portions of the University- advocacy route, the increase of noise in an open cut -- a much quieter mode than ground-level trains.

In addition, public officials anticipate that MetroLink expansion would reduce existing traffic congestion on congested streets, such as Millbrook Boulevard. The latest traffic counts by the St. Louis County Highway Department shows that 26,500 cars travel along Millbrook on an average workday.

According to Sverdroup's MITA study, the "north-of-the-park route" would offer a higher ridership than the alternate routes -- the route following Highway 40 would not have a single point near the Saint Louis Galleria that would require the destruction of at least 15 homes and businesses.

Along its existing route, MetroLink has been a nationally acclaimed success. Moving into its fourth year of operation, the system already has gained public expectations with an average daily ridership of more than 4,000. It is a faster mode of rail transit than typical light-rail operations and was described as "the best in the coun- try" by former U.S. Secretary of Trans- portation Federico Pena.

-- Martha Everet

Robert E. Thach, Ph.D., dean of the Graduate School of Arts and Sciences, has been elected to a three-year term on the Council of Graduate Schools' (CGS) board of directors. The CGS is an organiza- tion of higher-education institutions in North America engaged in gradu- ate education, research, scholarship and the preparation of candidates for advanced degrees. The CGS acts as a convening body, bringing graduate deans together to task forces, committees, work- shops, seminars and annual meetings to discuss and take action on major issues in graduate education.

Feb. 13, 1997 7
Hilltop Campus

The following is a partial list of positions available on the Hilltop Campus. More positions and those not listed here may be obtained by contacting the Office of the Dean of Student Affairs, by calling (314) 935-5555, or by e-mailing the Office of the Dean of Student Affairs.

Questions that have broad appeal to the University community should be submitted to the Office of the Dean of Student Affairs. They should appear anonymously in the Record, unless submitted your full name, department and telephone number with your typed question. For information, call (314) 935-6603.

Q. Recently, I've seen kids or student players playing games (such as hockey) around cars in parking lots. What are the University regulations regarding such activities?

A. It is likely that the individuals playing hockey were members of the Washington University Roller Hockey Club if you saw them in the Millbriod Boulevard parking garage. This is an organization that is self-regulated by the students. Student Affairs and plays hockey in the garage one or twice a week in the evening. They try to stay away from vehicles, and there have been no reports of complaints about the organization.

If you see this activity in other locations, University Police should be called at (314) 935-5555 to determine whether the activity should be reported to the Office of the Dean of Student Affairs.

Teams and organizations that do have constituent groups and are affiliated with the University should be aware of the University's rules and regulations, as well as those of other organizations with which they interact. For example, roller hockey is governed by the U.S. Hockey Rules, which are the rules of the National Collegiate Athletic Association (NCAA) for men's and women's hockey. The University has a formal relationship with the University of Missouri, St. Louis, which is registered with the NCAA. The NCAA has established guidelines for the conduct of hockey teams, including restrictions on the use of illegal equipment, such as modified hockey pucks and body checks. The University Police will enforce these guidelines and work with the appropriate authorities to ensure compliance with NCAA regulations.

Right on Line

Hilltop Campus

The following is a partial list of positions available on the Hilltop Campus. More positions and those not listed here may be obtained by contacting the Office of the Dean of Student Affairs, by calling (314) 935-5555, or by e-mailing the Office of the Dean of Student Affairs.

Questions that have broad appeal to the University community should be submitted to the Office of the Dean of Student Affairs. They should appear anonymously in the Record, unless submitted your full name, department and telephone number with your typed question. For information, call (314) 935-6603.

Q. Recently, I've seen kids or student players playing games (such as hockey) around cars in parking lots. What are the University regulations regarding such activities?

A. It is likely that the individuals playing hockey were members of the Washington University Roller Hockey Club if you saw them in the Millbriod Boulevard parking garage. This is an organization that is self-regulated by the students. Student Affairs and plays hockey in the garage one or twice a week in the evening. They try to stay away from vehicles, and there have been no reports of complaints about the organization.

If you see this activity in other locations, University Police should be called at (314) 935-5555 to determine whether the activity should be reported to the Office of the Dean of Student Affairs.

Teams and organizations that do have constituent groups and are affiliated with the University should be aware of the University's rules and regulations, as well as those of other organizations with which they interact. For example, roller hockey is governed by the U.S. Hockey Rules, which are the rules of the National Collegiate Athletic Association (NCAA) for men's and women's hockey. The University has a formal relationship with the University of Missouri, St. Louis, which is registered with the NCAA. The NCAA has established guidelines for the conduct of hockey teams, including restrictions on the use of illegal equipment, such as modified hockey pucks and body checks. The University Police will enforce these guidelines and work with the appropriate authorities to ensure compliance with NCAA regulations.

Right on Line

Hilltop Campus

The following is a partial list of positions available on the Hilltop Campus. More positions and those not listed here may be obtained by contacting the Office of the Dean of Student Affairs, by calling (314) 935-5555, or by e-mailing the Office of the Dean of Student Affairs.

Questions that have broad appeal to the University community should be submitted to the Office of the Dean of Student Affairs. They should appear anonymously in the Record, unless submitted your full name, department and telephone number with your typed question. For information, call (314) 935-6603.