President George Bush is greeted by Chancellor William F. Danforth and student volunteers/leaders on the platform as he arrives in the Field House.

President Bush praises University's student volunteers in talk

Praising Washington University as a shining example of his vision of a "Thousand Points of Light," President George Bush addressed a crowd of approximately 4,000 at 10:30 a.m. Friday, Feb. 17, at the Field House, during his first visit to a university campus since his inauguration.

The president, who was here to talk about student volunteers, recognized the efforts of the numerous student volunteers at Washington University, 680 of whom were given special seating at the speech.

"If we take this spirit evident in this gym here today and then multiply it by those thousands, we can do the job," he said.

Since his presidential campaign, the president has used the theme of a "Thousand Points of Light" to express support for an increase in volunteerism across America as a way of improving society.

The student volunteers were seated directly in front of and directly behind the stage. A large banner, stating "Washington University in St. Louis—Students Who Care," hung behind the president, and the walls of the gymnasium were covered with smaller banners signifying the many student volunteer efforts on campus.

The president, noting the banners, said, "These symbols, these signs around this room, I think sum up what I talk about when I talk about a thousand points of light. It is neighbor helping neighbor, it is a kid helping kid, it is friends holding out their hand to other friends."

Calling Washington University a "university of excellence," President Bush also praised the University's academic achievements. "Your community has built a pioneering effort in science and math," he said. "Your teaching, research and scholarly applications tell a story summed up best by two words—academic excellence."

"But there's another side of it, another side of the story that Washington University has to tell—a story from which all America can learn. It's a story about investing in America's future—how as students and faculty, administrators and alumni, you have shown that service and volunteerism can enrich education and enrich America."

He referred to the Washington students' volunteer work with the Special Olympics Basketball Tournament, which was held in the Field House two days after the president's visit, as "but one chapter in this thousand points of light.

The president also spoke about his budget proposals to Congress regarding education—a $550 million program to reward America's "merit schools," the establishment of special presidential awards for the best teachers in the country.

From tutoring kids to 'adopting' elderly, students volunteer with little fanfare

From working with abused and neglected children, to combating illiteracy, racism and world hunger, Washington University students recognize the importance of volunteerism.

"It's incredible to me that students take time out of their busy schedule to volunteer," says Kathy Almquist, the secretary for Campus Y, which sponsors 26 student-led volunteer programs this year alone. "They realize that volunteerism is such an important aspect of everyone's life. Communities can't survive unless people volunteer and do things for each other."

Harry E. Kloke, dean of student affairs, estimates that "at least 90 percent of our students are involved in some kind of altruistic activity during the year, much of it done with little fanfare."

Senior Angela Reed exemplifies the volunteer spirit of Washington student. As director of Outreach, a volunteer program of the Newman Center at the University, she has spent many weekends working in soup kitchens, dancing and talking with the elderly and weathering homes for those in need. She says weathering sheets is a required course for all students. "Everyone should see the homes these people live in and talk to the children living there," says Reed, a native of Kansas City, Mo. "This is reality and we need to do something about it. You can get into your own little bubble in school. A lot of people think of the poor as just statistics."

Melissa Piancecki doesn't view individuals as statistics. The second-year medical student works with an outreach program that brings health care and compassion to low-income preganant teen-agers. The Perinatal Project, which pairs medical students with public health nurses to visit pregnant teen-agers at home, began last year as a local effort of the American Medical Student Association.

As part of the project, Piancecki, who hails from rural Indiana, spent eight weeks at a north St. Louis health clinic. She developed solid ideas to help the Perinatal Project in its goal of reducing infant mortality. She also has put together a package of easy-to-understand educational materials for expectant mothers.

"It's so important for medical students to get an idea of the community and reach out beyond the medical center," Piancecki says. "To be good doctors we're going to have to treat and communicate well with a wide range of people."

More than 300 of Washington's student volunteers work with Campus Y programs ranging from tutoring elementary school children who speak English as their second language, to breaking down the isolation of older adults through the Adopt A Grandparent project.

Through other Campus Y programs, students tutor high schoolers; work with abused and neglected children at the Salvation Army Hope House; raise consciousness regarding racism and work toward its elimination on and off campus; and educate the community about hunger.

One of the University's primary student volunteer efforts this year

Former Manhattan Congresswoman Bella Abzug will present the seventh annual Eleanor Roosevelt Lecture in the Assembly Series at 11 a.m. Wednesday, March 1, in Givens Chapel. The lecture is free and open to the public.

A lawyer for more than 30 years, Abzug was a member of the U.S. Congress from 1970-1976. In 1976 she became the first woman to win a Democratic primary in New York to run for the U.S. Senate, finishing less than one percent behind the winner in the Democratic primary.

Abzug co-sponsored the original Equal Rights Amendment while a member of the House. In 1977 she was named by President Carter as a special assistant to the National Commission on the Observance of International Women's Year.

Abzug is the junior women's honorary of Washington University. For information, call 889-5285.

Photographer Eliot Porter will be the subject of two lectures to be given in conjunction with a 50-year retrospective of his work in the Gallery of Art In St. Louis on Friday.

The lectures and exhibit, which runs through March 26, mark the 150th anniversary of photography's invention. Porter is renowned for his use of color photography of nature.

Discussing the "father of color photography," Beaumont Newhall and David Scheinbaum will discuss Porter and his work during a lecture at 8 p.m. Friday, March 3, in Steinberg Hall auditorium. Janet Russek, Porter's daughter, will give a talk on the exhibit at 2 p.m. Saturday, March 4, in the art gallery. Both lectures are free and open to the public.

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One of the University's primary student volunteer efforts this year
**Volunteer projects**

Program sponsored by the Campus Y, student volunteers become playmates, dance instructors, etc., to a group of area residents. The program is designed for children who have no regular source of recreation, and serves to return an empty home after school. In a related program called Kinloch Tennis, students tutor and play games with children.

**Health care projects**

The Sigma Chi fraternity raised $1,500 for the American Heart Association through the Bounce for Beams program, while the Beta Theta Pi fraternity held Bowl-a-thon for Diabetes in November 1988, raising $850 for the National Diabetes Foundation. The Sigma Phi Epsilon fraternity also helps renovate the Salvation Army Hope Center for Abused and Homeless Children and takes neglected children to St. Louis Cardinals baseball games. The University Health Education Project comprises a group of Washington medical students who go into area schools to share what they’ve learned about preventive health care. The students answer students' questions about AIDS, human sexuality, general health and nutrition.

**University’s role in community**

- Students who are part of the Washington University Medical Center Health Services Department have collection sites around the medical schools to share what they’ve learned about preventative health care. The students also give talks and answer questions about AIDS, human sexuality, general health and nutrition.
- Among the humanitarian efforts of the Sigma Chi fraternity are weatherizing homes for the elderly with the North Side Community Center; sponsoring of Derby Days, which raises at least $1,000 yearly for the Woodrow Wilson Senior Center; helping Habitat for Humanity construct shelters for the homeless; and operating Casino Night, which raises $10,000 yearly for the Edgewood Children’s Home.
- The Sigma Alpha Mu fraternity, which raises $700 for the American Heart Association through the “Bounce for Beams” program.
- During a three-day head injury awareness campaign on behalf of the National Head Foundation, nearly 50 Beta Phi Sorority members raised $400 in donations from fellow students. Kappa Kappa Gamma Sorority also has raised funds for multiple sclerosis and has staffed the St. Louis Holiday Cab Hotline, which provides free cab service (up to a certain number of miles) to intoxicated people so they don’t drink and drive.

**Rewards for service projects**

- Students who participate in the “Rewards for Service Projects” program receive a certificate for each 50 hours of service, and by the Greater St. Louis Volunteer Projects, and by the Greater St. Louis Volunteer Projects.

**Tibetan Committee meeting**

The AAPI Student Council holds a meeting at the University of Missouri to discuss the current political and social situation in Tibet and Tibet's position in the international community. The meeting is attended by students from various schools and universities, including the University of Missouri, the University of Illinois, and the University of Chicago. The meeting is chaired by Dr. Jane Smith, a professor of political science at the University of Missouri. The meeting is held in a large lecture hall on the University of Missouri campus, and is attended by over 200 students and faculty members.

**Tibetan documentary**

A documentary film on Tibet will be shown at 7:30 p.m. Monday, Feb. 27, in Simon Hall auditorium. The film, a part of the AT&T PRESENTS "Day One," a 2 1/2 hour drama about the development and use of the atomic bomb, will be shown in the auditorium. The film is produced by AT&T and is co-sponsored by the University Assembly Series, Department of Asian Literatures, and the Asian Studies Program, and by the Greater St. Louis Chapter of the United Nations Association.

**Day One**

"Day One," a 2 1/2-hour drama about the development and use of the atomic bomb, will be shown at 7:30 p.m. Monday, Feb. 27, in Simon Hall auditorium. The film, an AT&T PRESENTS special, will be telecast on CTV-TV at 7 p.m. Sunday, March 5.

In this account of the Manhattan Project, Hungarian-Jewish scientist Leo Szilard, who fled Nazi Germany, seeks to convince American scientists and military and governmental leaders to build an atomic bomb before Hitler does. When Germany is defeated, without the use of the bomb, Szilard tries to prevent its use on Japan.

"The decision to drop the bomb was debated fiercely, even at that time," says the film's producer-writer David W. Rintels. "Some felt dropping the bomb was a military necessity to prevent the U.S. from having to invade Japan and suffer many casualties. 'Day One' shows there were people who felt the bomb would not prevail, something not generally known."

Rintels says the film does not seek to answer the question of whether or not the bomb should have been dropped: "I don't want to second-guess the events that happened, but describe them and show people the factors that went into these decisions and how the decisions were reached."

The panel discussion will be chaired by Michael W. Friedlander, Ph.D., professor of physics. Other participants include Jane Loewinger, Ph.D., William R. Stuckenberg Professor Emeritus of Human Values; William R. Caspary, Ph.D., associate professor of political science; and Henry W. Berger, Ph.D., associate professor of history.

Washington University was involved with the creation of atomic energy. In 1942 the University's cyclotron produced the plutonium that was studied for its fissionable qualities at Los Alamos. Arthur Holly Compton, a leader of the Manhattan Project, had been an instructor at Washington University before World War II. Upon returning as chancellor in 1945, he recruited six chemists from the Los Alamos staff.

The event, presented in cooperation with AT&T, is co-sponsored by the Assembly Series, Campus Y, CBClub, Towards Peace and Student Union. For information, call 889-5289.

**Documentary on Tibet will be shown**

A documentary film on Tibet will be shown at 7:30 p.m. Monday, Feb. 27, in Simon Hall auditorium. Tenzin Tethong, head of the United States-Tibet Committee in Washington, D.C., and Thubten Norbu, brother of the Dalai Lama and professor emeritus at the University of Indiana at Bloomington, will answer questions following the film.

The 42-minute documentary, produced by a BBC reporter, focuses on current political and social conditions in Tibet and discusses negotiations between the exiled Dalai Lama and China.

The event is co-sponsored by the Assembly Series, Department of Asian and Near Eastern Languages and Literatures, and the Asian Studies Program, and by the Greater St. Louis Chapter of the United Nations Association.

For information, call 889-5289.

**Day One continued from p. 1**
Marc B. Abrams, D.D.S., associate professor of oral and maxillofacial surgery at the School of Dental Medicine, Washington University, has been invited to lecture at the Third International Congress of Oral Osseotomies of the Mandible, which was published in the October 1988 Journal of Oral and Maxillofacial Surgery. In addition, Abrams wrote "Temporomandibular Joint Pro- scopy," which appeared in the September, 1987 edition of the St. Louis Dental Society. Abrams attended the International Conference on Os- seointegrated Implants at the Washington Medical Center in Washington, D.C.

Susan Fredrick Appleton, J.D. professor of law, has written an article titled "More Thoughts on the Physician's Constituional Role in Abortion and Related Choices" in Vol. 66 of the Washington University Law Quarterly.

John R. Bowen, Ph.D., assistant professor of anthropology, delivered three lectures at Yale University in New Haven on topics of Islam, politics and poetry in Indonesia. He also organ- ized a seminar at Yale with the American Anthropological Association on religion and public policy in Indonesia. The seminar was funded by a grant from the American Council of Learned Societies.

David Kilper and Herb Weitman Fitzpatrick, Fran Hooker and Carolyn Sanford Bernardo, Joyce Bono, Tony DiMartino, Tony C72245JW at WUVMD

Editor, Medical Record: Susan Killenberg, 369-0544, 5-2166 at WUN.

Photo: The Washington University Record will help to spread the good news. Contributions regarding significant faculty and staff scholarly or professional activity to Notables, Campus Box 1070, or by phone to 369-0544.


The editor welcomes contributions regarding significant faculty and staff scholarly or professional activity to Notables, Campus Box 1070, or by phone to 369-0544. The editor also is the key to brain damage, says an article in the Nov. 29 Times. "Vital, energetic and imaginative people," Danforth said.

"I wish to achieve nationally what this university has done historically — to make excellence in learning a way of life." — President Bush

Bush — continued from p. 1

every state, the expansion of magnet schools, and a program to encourage alternative certifications for teachers. "It is wrong," he said, "if one of you guys who graduated from a state school of excellence, one of you wants to go and give of yourselves to teach in some urban area in this country, he will have to work for this excellence, but because of some hide-bound restrictions having to do with too many certifications that keep young people, realistic people, from teaching. President Bush expressed a desire to attract students to the teaching profession. "I wish to achieve nationally what this university has done historically," he said, "to make excellence in learning a way of life." The president was introduced to the audience by Chancellor William H. Danforth. "What an honor it is to welcome the president to Washington University in St. Louis," Danforth said. "And what a privilege it is to introduce to the president a large sample of the Washington University community."

Washington University faculty and staff make news around the globe. Following is a digest of media coverage they have received during recent weeks for their scholarly activities, research and general expertise.

Amino acid glutamate, a protein component found in the human body, is a key to brain func- tion. Some scientists now believe it also is the key to behavior. Mr. Olney, whose name Washington University in St. Louis, Mo.

Heidegger and Architectural Theory," he continued. "President Bush expressed a desire to go and give of yourselves to teach in this country. He has been an admirable representative of our liberal tradition." — President Bush

Twelve other active student volunteers were among those attending a luncheon with President Bush at Unrab Hall immediately following the address. John Clark, Mark Davis, Mike Frand, Mary Hughes, Neil Jacobs, Melissa Jobe, Deborah Kaiz, Gregory Lacey, Trenelle Miller, David Scott, John Yang and Jolie Young.

In addition to University students, some alumni attending the luncheon in- cluded Special Olympics Patty Anderson and Jason Horn, Rae Arnof, a 7-year-old resident of Sebolt Build- ing, a senior citizens apartment building, Brule Ayalew, a 9-year-old from Ethopia who participates in the "English as a Second Language" program at Sebolt. He was honored to meet him and had the audience by Chancellor William H. Danforth at the athletic complex, 700 more watched on a closed circuit television in Edinboro Theatre.

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President Bush comes to Washington

Sharing the platform with President Bush are (front row, from left) Susan Culican, president of Alpha Phi Omega; Sen. Christopher S. Bond; Gov. John Ashcroft; Chancellor Danforth; and Tiffany Mondy, program leader for Campus Y's "Adopt a Grandparent" program; (back row, from left) Rep. Jack Buechner; Eric Berger, founder of Washington's Special Olympics Basketball Tournament; Arlena Ahluwalia, president of Chimes; Lee M. Liberman, chairman of Board of Trustees; Secret Service agent; Cynthia Homan, president of Student Union; and David Miller, a member of Hillel's "Help the Homeless and Hungry" committee.

Above, Chancellor William H. Danforth welcomes President Bush to Washington University. Left, Michael Carter, Campus Y Cabinet member and president of the Association of Black Students, addresses the audience about student volunteerism before the president arrives.
President Bush addresses a crowd of approximately 4,000, which includes students, faculty, staff and recipients of student volunteer efforts. Banners representing organizations that receive help from the students line the Field House walls.

Above, some 150 members of the national and local media, including representatives from all major network and cable television news stations, covered the president’s talk in the Field House. Left, Daniel G. Bradshaw, a comprehensive skills interpreter with Deaf Interlink, interprets President Bush’s speech both orally and through signs for the benefit of the hearing impaired.
After an unsuccessful attempt to meet with President Bush at the presidential inauguration in Washington, D.C., Keith Croffoot, a 7-year-old Belleville, Ill., boy who has AIDS, and his mother, Deana Croffoot, had a private meeting with the president in an office in the Field House before the speech.

The Pikens, a 13-member men's acappella group, performed for 20 minutes before the president's speech began at approximately 10:30 a.m. The capacity crowd, which began entering the Field House at 8:30 a.m., also was entertained by the Washington University Concert Band.
Dining with the president

Following his speech Friday, the president attended a small luncheon in Umrah Hall lounge, where he was given the opportunity — in between bites of a taco sandwich and pork rinds and sips of diet Coke — to question 12 Washington University students about their personal involvement with volunteerism on campus and to talk with some of the recipients of those volunteer efforts.

Although some members of the media were allowed to attend the luncheon, President Bush declined answering any "press questions," giving his full attention instead to the students and those who receive their assistance.

Students attending the luncheon were: John Clark, winner of the 1988 Fraternity Philanthropy Award; Mark Davis, member of Alpha Phi Omega (APO) service fraternity; Mike Frand, student chairman for the Special Olympics Basketball Tournament at the University; Mary Hughes, co-chair of the Campus Y Cabinet; Neil Jacobs, who handles publicity and public relations for the Special Olympics; Melissa Jobe, APO member; Deborah Kaiz, who is active in several Hillel House volunteer efforts; Gregory Lacey, a volunteer with Kappa Alpha Psi fraternity; Trente Alyson Miller, a volunteer with Kappa Kappa Gamma sorority; David Scott, president of Thurtene, the junior men’s honorary; John Yang, Campus Y volunteer; and Jonelle Young, program leader for the Adopt-A-Grandparent program.

Others attending the luncheon included Special Olympians Patty Anderson and Jason Horn; Rae Arnoff, a 77-year-old resident of Seltzer Building, a senior citizens apartment building; Briske Ayalew, a 9-year-old from Ethiopia who participates in the "English as a Second Language" program; Darren Politte, a 14-year-old student at St. Joseph Institute for the Deaf; John Sununu, White House chief of staff; Gov. John Ashcroft, R-Mo.; Sen. Christopher S. Bond, R-Mo.; and Rep. Jack Buechner, R-Kirkwood.
Scientists use new technique to explore brain’s nerve pathways

Using a new fluorescent dye technique to examine brain tissue, Andreas Burkhalter, Ph.D., is principal investigator of a study verifying the existence of connections within the human visual pathway that had previously only been postulated to exist. This finding ultimately could lead to a better understanding of certain degenerative diseases, developmental disorders and possibly the aging process.

Burkhalter approached Bernardo because he also had experience with labeling techniques in mammalian sensory pathways, and because as a neurosurgeon he had ready access to human brain tissue. (Human brain tissue for research is taken from specimens obtained during routine post-mortem examinations.)

So far, they can only say for certain that the human visual cortex is similar to that of a monkey. And for the first time, the brain and its many nerve connections are open to further experimentation, using this fluorescent dye technique. There is a lot of work to do before the technique can be used in humans.

I would be extremely surprised if this technique doesn’t become a major tool for investigations in human neurobiology, at least over the next few years. The limitations of the technique have yet to be determined. We’ll have to see how far we can take it.

As both were aware, what science knows of brain physiology and anatomy comes largely from animal studies, especially in monkeys. Yet no one has been able to analyze human brain tissue closely enough to be certain that this animal data holds true for it, too. Most other tracers capable of highlighting nerve connections work only in living tissue, and for that reason can’t be used in humans.

Still other methods — silver-staining techniques, for example — have long been used to analyze degenerated nerve fibers in brain tissue that suffered some injury. But years may elapse between the patient’s injury and death. By the time death occurs, cell debris produced by the injury may no longer be detectable by the silver-staining method. Also, damage to the brain is seldom selective enough to allow investigation of fine connectional anatomy in a specific area of the brain.

So this new fluorescent dye technique, which works in autopsy tissue, opened new possibilities to the researchers. Once injected into a bundle of nerve fibers, the dye travels in one direction toward the cell body, and in the other toward the nerve endings. And the intense signal it produces can easily be seen under a fluorescent microscope. Choosing an area of the brain to investigate was easy, says Burkhalter. He was already working within the visual cortex, a part of the cerebral cortex that in humans is readily identified by a whitish stripe — the site of Genain — running along the occipital pole. To the naked eye, the rest of the cerebral cortex is a large blank sheet, without any obvious landmarks.

"To be working with an area we can precisely locate is an advantage," says Burkhalter. "It allows us to study connections within that limited area, as well as connections within and between adjacent areas.

What’s more, the visual cortex is a fascinating part of the brain. Each eye breaks down a complicated scene and translates it into a signal, which passes through the optic nerve and on to the visual cortex. There, signals from both eyes merge into a three-dimensional image that has both color and form. Burkhalter hopes that scientists at some point may determine which sets of nerve connections perform which functions. In the 85-year-old brain they studied, for example, what might the absence of those particular connections mean? Little is known about their role in the human brain.

And if this same absence of connections shows up in further study, could it signal the need for some, still-visionary ‘rescue mission’ to keep these connections alive? Possibly, says Burkhalter, but not necessarily. Nerve connections form early in fetal development; they break down and re-form, even disappear completely, many times during the early months of life. ‘Maybe this is an ongoing process,’ he speculates. ‘As we crystallize our thoughts and behaviors over time, it may be necessary to eliminate some connections to allow some behaviors and thought processes to occur more quickly and efficiently.’

He and Bernardo are now focusing their research on nerve connections in pre-natal and elderly brains. They are asking a series of intriguing questions: How do cortical connections develop? Which ones develop first? Is the development of certain connections pre-natal somehow linked to certain neurological disorders or birth defects? And do ‘normal’ connections remain stable over a lifetime or do they break down, as part of the normal aging process or in certain degenerative diseases?

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I would be extremely surprised if this technique doesn’t become a major tool for investigations in human neurobiology, at least over the next few years," says Burkhalter. "The limitations of the technique have yet to be determined. We’ll have to see how far we can take it."
Ronald Evens appointed to radiology board

Ronald G. Evens, M.D., professor of radiology and director of Mallinckrodt Institute of Radiology, was appointed to the board of chancellors of the American College of Radiology (ACR). The Board of Chancellors is the governing body of the ACR, setting policy for that national organization on the advice of the elected council members. The position is filled only by recognized leaders in the field and is one of the most senior positions in the profession—definitely an honor," says Paul Fullagar of the ACR.

Ronald Evens was appointed to the chairmanship of the ACR's Commission on Technology Assessment and Efficacy Studies. The commission studies new treatments and technologies. In addition to guiding radiologists, the information is made available to other medical specialties to inform physicians about the efficacy and application of radiology's developing techniques.

Evens was appointed director of Mallinckrodt Institute in 1971. At age 31, he was the School of Medicine's youngest department chairman. His expertise in sonography, which he began teaching in medicine has led Evens to serve as consultant to industry, medical centers, universities and governmental organizations.

Ronald G. Evens, M.D. (bottom right) joined the School of Medicine's Hearing Test Lab, 362-7489.

Dermatology study seeks patients

Researchers at the School of Medicine are seeking volunteers to participate in a study testing a new treatment for acne.

The study involves testing the effectiveness of two widely used anti-acne medications when used in combination. Investigators are Dr. John Martin, M.D., instructor in dermatology; and Jacqueline Dítulo, M.D., assistant in medicine. The protocol is funded by Herbert Laboratories, maker of the acne medications.

To be eligible for the study, volunteers must be aged 14 or older and have mild to moderate acne. They must be off other topical acne medication for at least two weeks and off antibiotics for at least four weeks. Excluded from the study are pregnant or nursing women and people who have previously been treated with Accutane.

Participants will be given a 1-week supply of medication that they will apply directly to the acne. There is no charge for the medication or consultation, and each patient who completes the study will receive $40.

For more information, call Sharon Jenkins at the School of Medicine's dermatology outpatient center, 362-2543.

Volunteers needed for hearing study

Audioologists at the School of Medicine are seeking volunteers for a hearing study.

The study involves testing and comparing the reliability of two types of equipment used for ultra high frequency hearing testing. Males aged 25 or younger are needed for the project.

Participants will receive a free hearing test to determine if they have a hearing impairment. If their hearing is normal, then tests for high frequency sounds will be performed with both devices.

For more information, call the Hearing Test Lab, 362-7489.

Roy Petrie, M.D., starts a fetus with a sound stimulator. The heart rate acceleration that results can be used as an indicator of the unborn child's well-being.

‘Startling’ discovery

Pre-birth stimulation test is sound off for babies in distress

Obstetricians at the School of Medicine are using a "startling" new method that can serve instead of a fetal blood sample to determine if a fetus is getting enough oxygen during labor. The method, as described in the October issue of Obstetrics and Gynecology, may both decrease brain damage in infants and reduce the number of unnecessary cesarean sections, according to Roy H. Petrie, M.D., professor of obstetrics and gynecology.

The new test entails literally startling the fetus with a sound stimulator that is placed on the mother's abdomen, over the baby's ear. When stimulated, or buzzed, the heart rates of fetuses who are getting enough oxygen go up in the same way the heart rates of adults go up in response to a loud, unexpected noise, Petrie says. But if the heart rate of a fetus does not increase by at least 10 beats per second for 10 seconds, it is probably not getting enough oxygen and may suffer brain damage if not immediately removed from the womb.

Fetal oxygen deprivation is a problem in 5 to 10 percent of all pregnancies, according to Petrie. Fetuses who do not have enough oxygen for their metabolism must get their energy from an alternative biochemical pathway that produces lactic acid—a byproduct that literally "burns" brain cells.

Physicians have monitored fetal heart rates as a means of detecting fetal distress during labor for the last 15 years. But while a normal heart rate is very accurate for ruling out problems, only 35 to 50 percent of fetuses with abnormal heart rates actually have a problem. "Fetal heart rate monitoring is very good for making a diagnosis of death," Petrie explains. "But when you try to use the same technique to diagnose babies that may be sick and need to be taken out by cesarean section or by early force of delivery, it's not a very good technique."

Physicians have traditionally used blood analysis to distinguish fetuses with abnormal heart rates who are in distress from those who are not. Fetal blood is collected with a tube-like endoscope that is inserted into the birth canal and used to prick the baby's scalp. Once obtained, the blood is tested for acid-base content, or pH. While fetal blood sampling is very accurate, obtaining the sample is very difficult. The new method being used at the School of Medicine yields the same information without having to prick the baby in the head, or put an already uncomfortable mother into the frog-like position required for blood sampling.

As described in their Obstetrics and Gynecology article, "Fetal Vi- broacoustic Stimulation: Magnitude and Duration of Fetal Heart Rate Accelerations as a Marker of Fetal Health," Petrie and colleagues Gregg B. Polatin, Kari J. Blakemore and Errol Amon used both the startling and more conventional blood sampling methods in 100 patients who exhibited abnor- mal heart rates. The blood pH of those babies whose heart rates accelerated by at least 10 beats per second for 10 seconds were found to be within the normal range, while those with lower or no heart rate accelerations had abnormally acidic pHs (which could cause brain damage), and were subsequently removed by cesarean section.

Not only did Petrie and his fellow researchers discover that heart rate response correlated with blood pH, but they also identified two different levels of response. Fetuses whose heart rates accelerated 10 beats per second for 10 seconds but less than 15 beats per minute for 15 seconds were more likely to develop problems later in labor, and required closer monitor- ing than fetuses with greater accelerations.

"We found no differences between the two groups in the short- range, but as the labor goes on, the group with heart rate accelerations less than 15 had less base excess," Petrie says. "When we say base excess, we mean buffer reserve—the amount of buffers available for neutralizing that terrible acid. As you use more and more buffers to neutralize the acid, the base deficit gets larger and larger. You've used up your bank account and you're borrowing from the bank. Soon you're going to go into Chapter Eleven, because you've borrowed all you can and you can't pay it back."

While the heart rate response method used by Petrie and others at the School of Medicine can substitute for a conventional blood test, it will probably never replace it. Yet, because it is so much easier to do, the new method can be done much more frequently and therefore provide closer monitoring and better knowledge of fetal health than ever before—knowledge that can potentially decrease both the incidence of fetal brain damage and number of unecessary and unwanted cesarean sections.

Dr. Petrie's study is an important addition to the growing literature concerning this method of antenatal testing for fetal well-being," according to F. Sessions Cole, M.D., Director of the Division of Newborn Medicine at Children's Hospital. The observations by Dr. Petrie and his collaborators are a helpful addition in our attempts to decrease the risk of brain damage for newborn infants. Further analysis of the usefulness of this antenatal assessment tool will provide momentum for continued improvement in neonatal outcome.
Infertile couples offered hope with new procedure

An innovative procedure that offers new hope for 3.5 million infertile couples in the United States was recently offered at Malinckrodt Institute of Radiology and Barnes Hospital, which is jointly operated by Washington University School of Medicine.

The medical center is one of the first major medical centers in Missouri and the Midwest to offer this procedure. Infertility — the inability to conceive after one year of unprotected intercourse — affects 15 percent of couples in the United States and an additional 10 percent who want more children.

In 50 percent of the cases, infertility is attributed to the male, with the major problem resulting from blockage due to infection in both the Fallopian tubes. When the Fallopian tubes are obstructed, the egg does not make contact with the sperm and conception cannot occur.

Through this new procedure, the extent of tubal blockage can be more accurately assessed by first delivering a contrast agent via a catheter directly into the Fallopian tube. After an X-ray determines the extent of blockage in the tube, if any, an attempt can now be made to clear the obstruction by feeding a guidewire through the catheter into the tubes. Selective ostial salpingography — the X-ray portion of the procedure — more clearly defines tubal anatomy than did previous techniques, which placed the contrast agent only in the uterus. If the blockage is confirmed, redefinition (clearing the obstruction) can be performed at the same time — an additional advantage.

Collaborators for the project are Bruce McClenann, M.D., professor of radiology, and Jorge Pineda, M.D., associate professor of obstetrics and gynecology.

According to McClenann, "This procedure vastly improves diagnosis of Fallopian tube disease. The patient experiences a little discomfort, but can undergo this low-cost, non-surgical treatment in an outpatient basis."

He adds that statistics from the Oregon Health Sciences University in Portland, where this procedure has been performed, shows a good success rate in identifying and subsequently clearing tube blockage.

Dental school needs volunteer patients for licensing exams

The School of Dental Medicine is seeking volunteers to serve as patients for senior students when they take their licensing examinations this spring.

Volunteers must be at least 18 years old. Those who are selected as patients will receive free dental treatment during the licensing examinations, scheduled for May 10-30.

To identify suitable patients, free screenings will be held April 5-7 at the dental school, located at 4559 Scott Ave., near the intersection of Euclid and Barnes Hospital Plaza. The screenings will include a medical history, X-rays, oral examination and diagnosis of dental work that may be needed, but not treatment.

For more information or to make an appointment, call the School of Dental Medicine weekdays between 9 a.m. and 5 p.m. at 555-3090.

1988-89 Olin Medical fellows: The School of Medicine held a luncheon Feb. 15 at the Whittemore House to honor 10 students who recently were named Spencer T. and Ann W. Olin Medical fellows. The fellowships were created last year in an effort to help fill the continuing shortage of physicians who provide service to low-income and underserved populations, which provide service to low-income and underserved populations, which provide service to low-income and underserved populations, which provide service to low-income and underserved populations.

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Ear infections: Kids' #1 medical problem

Otitis media, better known as a middle ear infection, is the most common disease in the world, according to studies show.

Antibiotic drugs have decreased the incidence of many infectious diseases, chronic middle ear conditions have inexplicably increased, says a pediatrician at the School of Medicine.

Rodney P. Lusk, M.D., an assistant professor of pediatrics and otorhinolaryngology and director of the Division of Pediatric Otorhinolaryngology at St. Louis Children's Hospital, says otitis media prompts about 30 million doctors' visits annually. By their sixth birthday, Lusk says, 90 percent of all American children have had at least one ear infection.

The underlying cause of recurring ear infections is poor eustachian tube function. This small tube passes from the middle ear to the back of the nose. It allows air to equalize within the middle ear and maintain equal pressure on both sides of the ear. The eustachian tube is the ears’ hearing instrument. If the eustachian tubes do not work well, and according to Lusk, in small children they often don’t, negative pressure and fluid can be trapped in the middle ear. Up to 50 percent of hearing ability can be lost temporarily when fluid is located in the middle ear, he says, pointing out that the fluid may or may not be associated by ear infections.

Ear infections occur most frequently in children 12 to 36 months old, but some may not outgrow them until they are in their teens, according to Lusk. Allergies, colds, bacterial and viral infections and other illnesses can prompt eustachian tube swelling and mucous accumulation which lead to ear infections. Other factors are cigarette smoke and "bottle feeding," feeding an infant on its back. Antibiotic therapy cures most, but not all, of these infections and fluid accumulations, according to Lusk.

Tubes are warranted when a child has recurrent ear infections or when fluid is present in the middle ear longer than 10 or 12 weeks, according to Lusk. In one medical problem. While others accept, absolute indications for tube surgery are very few, Lusk says, the tiny holes in the ear drum that close on their own after the short-acting tubes fall out of the ears. A minor operation will close holes that do not heal spontaneously. The child may be left with some ear drum scarring which has not been shown to affect hearing. Persistent infection also have been noted to cause swelling and significant retraction of the ear drum. Lusk points out. Sometimes the retraction is so great, he says, that a three- to four-hour operation is needed to correct the problem.

While some people continue to debate the effectiveness of ear tubes, Lusk says studies clearly show they can be extremely helpful. "New children can require them, and the needs for each child should be determined individually," he says, adding that ongoing studies will continue to influence decisions on the indications for tube placement.

Breast implants hinder cancer diagnosis

Silicone-filled implants used in surgery to increase breast size make diagnosing breast cancer more difficult, according to a radiologist at the School of Medicine.

In a paper presented in December at the 74th Scientific Assembly of the Radiological Society of North America (RSNA), Judy Destouet, M.D., associate professor of radiology at the Mallinckrodt Institute of Radiology, called for development of a new, radiolucent implant that will not obscure breast tissue.

The radiopaque silicone in today's implants often blocks a doctor's view during mammography — currently the most effective method of detecting breast cancer early. Patients with implants filled with peanut oil and sunflower oil allowed the clearest view of calcifications and masses. While peanut oil is not a real possibility as an implant material, Destouet says it does exist in the six-year Medical Student Training Program (MSTP) and three pursuing doctoral degrees in biomedical science. This year’s awardees (from left) Tom Conger, Brad Gorkson, Benjamin White, Rebecca Green, Chuck now from left Mark Rich, David Martin, Rubenia Lorenzo, William Shu, Scott Sellick and Marianne Sweetser.
Drug-free environment promoted

It is the goal of Washington University to protect the public health, safety and environment of members of the University community by promoting a drug-free environment.

In accordance with recently enacted legislation, Washington University follows the general guidelines to manufacture, distribute, dispense, possess, use or illegal drugs at Washington University.

Violations of the drug-free policy will be handled according to existing policies and procedures covering the conduct of administrators, faculty, staff members.

Training programs are being developed to provide information about creating and maintaining a drug-free environment.

Referrals to drug counseling and rehabilitation programs are available to the University community. Information about counseling and drug programs may be obtained as follows:

- Students — University Health Services, Karl Umrath Hall, Box 1201, 889-6666.
- Hilltop Campus — Personnel Office, 126 North Brookings Hall, Box 1181, 889-5990.
- Medical school, Lisa Poor, Department, Box 8040, 889-5990.
- Dental school, Thomas Schill, Box 8000, 654-0390.

Dependent care tax laws change

Taxpayers will encounter changes in the law concerning dependent care, effective for the 1989 tax return.

The major changes are — identification of the care provider on the employee tax return; coordination of the dependent care tax credit with the employer pre-tax dependent care assistance plan. Any amount excluded by an employee as dependent care assistance payments may not qualify for any other type of income tax deduction or credit — taxpayers who pay care providers in cash and skip the Social Security tax on those wages will be bailed from claiming the child-care credit; and — The definition of a qualifying dependent is changed to include children under the age of 13 (rather than 15).

Members of the University community who participate in the dependent care benefit plan should seek advice from their tax advisers.

BC-BS claims and benefits information

With the change in our Blue Cross-Blue Shield plan to an Alliance Plus Comprehensive Major Medical plan, many of our employees continued to maintain TIAA Major Medical as additional coverage.

TIAA Major Medical will continue to be supplemental coverage to the new BC-BS Alliance Plus plan. All claims are submitted first to BC-BS and if there are charges in excess of the $400 deductible and the portion paid by BC-BS, these excess charges should be submitted to TIAA Major Medical.

Generally physicians, hospitals and other providers will submit claims directly to BC-BS. If a provider does not submit charges directly to BC-BS, claims forms may be obtained in the Personnel Office; 126 North Brooks Hall, Box 8106, 889-6666.

The new BC-BS Alliance Plus program provides for the following benefits for mental illness: Inpatient care benefits will be provided up to 30 days per calendar year; outpatient care is 50 percent coverage per visit up to $1,500 per calendar year.

Open position in General Counsel office

Washington University is conducting a search to fill a professional position on the Hilltop Campus. Detailed information about the qualifications and the application procedure can be obtained from Sharon George in the Personnel Office at 889-5990.

Assistant General Counsel

The Assistant General Counsel will work with the staff of the Office of the General Counsel, Risk Management Office, outside counsel and independent in providing legal service to Washington University.

The Office of the General Counsel provides representation to the Hilltop and Medical campuses; a great diversity of legal problems and situations will be encountered.

The principal responsibility of the counsel will be to work with the General Counsel on a variety of matters to be assigned. This is an entry-level position.

Applicants must have the following qualifications: graduation from law school in 1988 or 1989; an outstanding academic record; experience in higher education, health care or personnel management; an ability to work well with people; evidence of excellent legal, professional competence; an ability to evaluate legal issues in the context of University policies and provide practical and relevant guidance; and admission to practice in Missouri or the intention to take the Missouri bar exam in 1989.

Submit a resume to: Peter H. Rupprecht, Assistant General Counsel, Washington University, One Brookings Drive, Campus Box 1058, St. Louis, Missouri 63130.

All resumes must include three references and be received by March 1, 1989.
LEGEND

SPORTS

WU vs. U. of Chicago. Field House.

Friday, March 3

5:30 p.m. Women's Basketball, WU vs. U. of Chicago. Field House.

Thursday, March 2


Wednesday, March 1

11 a.m.-12:30 p.m. University College Seminar, "Social Movements and the Rest of the French History," Donald J. Seif, lecturer, WU, director of the Center for Education and Social Action, National University, St. Louis.

Friday, February 24

8 p.m. Dept. of Music Presents a Piano Concert, Joel Shapiro, pianist, U. of Illinois at Chicago. Field House. For info., call 889-1224.

Friday, February 24

7:30 p.m. Gallery of Art Lecture, "I Have hardly left my piano this entire time. Exploring the composer's emotions and passions of the composer's music," Theodore Brown, music professor emeritus at New York University.

Thursday, March 2

4 p.m. Dept. of Political Science Seminar, "Incorporating Manufacturing Strategies: The Case of Honda America," Andrew Smith, assistant professor, University of Illinois at Urbana-Champaign.

Wednesday, March 1

7:30 p.m. Gallery of Art Lecture, "Signature in Bronze," Bruce Baker, sculptor, National Academy of Design, New York, N.Y.

Thursday, March 2


Thursday, March 2

10 a.m.-12:30 p.m. Dept. of Music Presents a Lecture Series, "Romances of the West," Alan King, lecturer, WU, Chemistry Club Chapel.

Friday, March 3

8:30-9:30 a.m. WU-ASPA Travel Lecture Series, "Eliot Porter," Eloise Porter, B teaching assistant, Stanford University, Bldg. Lounge. For info., call 889-4606.


Saturday, February 25

11 a.m.-12:30 p.m. Dept. of Music Presents a Filmboard Series, "I Have hardly left my piano this entire time. Exploring the composer's emotions and passions of the composer's music," Theodore Brown, music professor emeritus at New York University. Both the 9:30 a.m. and 9:30 p.m. Filmboard Series, $10. For more info., call 889-1224.

Monday, February 27

10 a.m.-12:30 p.m. Department of English and Language Studies Seminar, "Power and Influence in the Field of Economics," Joseph M. Schumpeter, assistant professor, University of Illinois at Urbana-Champaign.

Monday, February 27


10 a.m.-12:30 p.m. Dept. of Music Presents a Lecture Series, "Women in Unfulfilling Relationships," Joan Higley, director, Alzheimer's Disease and Related Disorders Program.

Thursday, March 2

10 a.m.-12:30 p.m. Department of English and Language Studies Seminar, "Women in Unfulfilling Relationships," Joan Higley, director, Alzheimer's Disease and Related Disorders Program.

Wednesday, March 1


Tuesday, February 28

8 p.m. Filmboard Series, "I Have hardly left my piano this entire time. Exploring the composer's emotions and passions of the composer's music," Theodore Brown, music professor emeritus at New York University. Both the 9:30 a.m. and 9:30 p.m. Filmboard Series, $10. For more info., call 889-1224.

Tuesday, February 28

7:30 p.m. Filmboard Series, "Frida Kahlo," Brown Hall. (Also Sat., March 4, same times, Brown.)

Tuesday, February 28

7-9 p.m. Filmboard Series, "Black History Month," Brown Hall. (Also Sat., March 4, same times, Brown.)

Friday, February 24

8:30 p.m. Edison Theatre Presents the Royal National Theatre of Great Britain Workshop, "FH, The Life is Going — Implications for Social Work Training," Pamela Zoio, director, Country Court Residential Program, Kristine Hightower, director, Alzheimer's Disease and Related Disorders Program.

Monday, February 27

10:30 a.m.-12 noon, Royal National Theatre of Great Britain Workshop, "Regional Metamorphism and the Rest of the French History," W. G. McMillen."

Thursday, March 2


Saturday, February 25


Friday, February 24

4 p.m. Dept. of Chemistry Seminar, "The Role of Research," William F. Fearon, Ph.D., WU, Dept. of Electrical Engineering.

Friday, March 3

8 p.m. Edison Theatre Presents the Royal National Theatre of Great Britain Workshop, "Apart from Great Britain," Edison Theatre. General public, $5; students and WU faculty and staff, $3 for students. For more info., call 889-6543.

Tuesday, February 28

8 p.m. Edison Theatre Presents the Royal National Theatre of Great Britain Workshop, "Regional Metamorphism and the Rest of the French History," W. G. McMillen.

Monday, February 27


Friday, February 24

5:30 p.m. Women's Basketball, WU vs. U. of Chicago. Field House.

Wednesday, March 1

10 a.m.-12:30 p.m. Department of English and Language Studies Seminar, "Women in Unfulfilling Relationships," Joan Higley, director, Alzheimer's Disease and Related Disorders Program.

Monday, February 27

10:30 a.m.-12 noon, Royal National Theatre of Great Britain Workshop, "Political Science," focusing on how to write and manage a national career counselor program. Drama Studio, Mallinckrodt. (Also Sat., March 4, same time.) For more info., call 889-6543.

Wednesday, March 1


Thursday, March 2

9:30 a.m.-1:30 p.m. University College Career Workshop, "After Homemaking: Career Development for the Retired Career Woman," Gail Moore, WU academic advisor and career counselor and WU academic advisor. Thursday, forum room 609. For registration, call 726-6177.

Tuesday, February 28

3-5:30 p.m. Women's Basketball, WU vs. U. of Chicago. Field House.

Monday, February 27

10:30 a.m.-12 noon, Royal National Theatre of Great Britain Workshop, "Practical Scene Design," focusing on design for playwrights who are dissatisfied with their relationships with scenic artists. Forum Room 108, Sheraton. For more info., call 889-6543.