A new technique enables doctors to directly examine the lining of milk ducts in the breast for early signs of cancer and other abnormalities. School of Medicine researchers used a technique, known as ductoscopy, to detect breast abnormalities in women with a condition called pathologic nipple discharge (PND). The findings were published in the October issue of the journal Surgery. "This technique is much more newsworthy than anything we've had in the past for identifying and localizing abnormalities in the breast in women with a history of nipple discharge," said first author Jill Richardson Dietz, M.D., assistant professor of surgery and a surgeon at the Alvin J. Siteman Cancer Center at the School of Medicine and Barnes-Jewish Hospital. "Ductoscopy helps the surgeons find the lesion, take it out and save normal breast tissue." According to Dietz, the technique also may help surgeons detect and treat breast cancer — more than 85 percent of which arises in milk ducts. PND is a clearish, bloody discharge from a milk duct. Only a small percentage of women experience the problem, and fewer than 5 percent of women have a sign of cancer. Most often, PND is caused by benign changes such as the growth of tiny polyps, known as papillomas, in the ducts. Doctors traditionally treat the condition by surgically removing the duct system if there is excessive fluid, but it is often difficult to locate and remove the tissue within the breast. For example, ductograms — flat, two-dimensional mammograms that use a dye injected into the duct at the nipple — may not precisely or completely locate abnormalities. After ductoscopy, however, surgeons can sometimes insert a fiber-like probe into the affected duct and remove the tissue around the probe, or they may remove all the ducts behind the nipple. These procedures often require an educated guess about the location of unhealthy tissue within the breast and often result in removal of a relatively large amount of healthy tissue as well. During ductoscopy, the surgeon threads a hollow tube, about 1 millimeter in diameter, into the affected milk duct. The tube (See Technique, Page 3) could Taylor-made drugs be wave of the future? 

BY CAROLYN JONES OTTEN

Today, even the best cancer treatments kill about as many healthy cells as cancer cells. But John-Stephen A. Taylor, Ph.D., professor of chemistry in Arts & Sciences, has a plan to improve that ratio. Over the past several years, Taylor has begun to lay the conceptual and experimental groundwork for a radical new strategy for chemotherapy — one that turns existing drugs into medicinal "smart bombs" if you will. All DNA is formed of three basic components: a phosphate and a sugar, which combine to form the sides of the double helix "ladder," and a base that forms the ladder's "rungs." All variations in DNA, including cancer mutations, are the result of unique sequencing of the four types of bases, denoted A, G, C, and T. Taylor's approach, described as "nucleic acid-triggered catalytic drug release," is essentially a sophisticated drug releasing system that is able to recognize and use cancerous sequences as triggering mechanisms for the very drugs that fight them. The beauty of this system is that it could use already-approved (Food and Drug Administration) drugs. Taylor said, "So all I have to worry about is getting FDA approval on the general catalytic mechanism, and then I can incorporate what ever anticancer drugs are currently on the market." Taylor discussed his work at the 40th Annual New Horizons in Science Writing, hosted by the University Oct. 29-30.

Guiding drugs to their parking spot

In nucleic acids, Mother Nature has already determined the rules of base pairing. A binds with T and G pairs with C — a system called "Watson-Crick base-pairing," named for the discoverers of the double helix. (See Drugs, Page 6)

Taylor

Dietz

Distinguished faculty Rose M. Davila, M.D., associate professor of pathology and immunology in the School of Medicine, accepts a Distinguished Faculty Award from Chancellor Mark S. Wrighton at the Founders Day ceremony Nov. 9 at America's Center. She was one of four faculty members chosen to receive this award. Also honored were Lee Epstein, Ph.D., the Edward Mallinckrodt Distinguished University Professor of Political Science in Arts & Sciences and professor of law; Ronald A. Leser, professor of art; and James T. Little, Ph.D., professor of finance and economics in the Olin School of Business. More than 1,000 alumni and guests attended the Alumni Association's celebration of the 149th anniversary of the University's founding.

Volleyball to start national title hunt at home

BY CHRIS MITCHELL

The No. 2 volleyball team begins its quest for a Division III-record eighth national championship as the Bears host the Central Regional of the 2002 NCAA Division III Volleyball Tournament Nov. 14-16 at the Field House. After bowing out in the quarterfinals last season, head coach Rich Luenneman and the Bears have only one thing on their minds this year: a national championship.

"The national championship is definitely on our minds," Luenneman said. "To capture the title, we need to serve tough, pass well, maintain focus throughout the matches, and continue to "flow.""

And flowing is what the Bears have done in 2002. They began the season with a 31-match winning streak, capturing five tournament championships along the way. "Beginning the season with a 31-match winning streak was a confidence builder for us," Luenneman said. "We loaded our schedule with as many tough opponents as possible, and our successes against them proved we can beat anyone in Division III."

At 37-1, the Bears earned an automatic bid to the NCAA tournament after winning their 14th straight University Athletic Association Tournament Nov. 1. The Bears have a first-round bye in the NCAA Division III Volleyball Tournaments Central Regional, held at the Field House Nov. 14-16. WUSTL will take on home court at 7 p.m. today to face the winner of the Nov. 14 Maryville College-St. Olaf College contest (results were not available at press time). If the Bears win today's match, they'll play at 7 p.m. Nov. 18 for the regional title and a berth in the NCAA quarterfinals. Tickets are $8 for adults, $3 for children; WUSTL undergraduate students are admitted free with student identification.

For more information, call 905-3205.

- Football team won second consecutive University Athletic Association title with a home victory over Carnegie Mellon University.
- Women's soccer defeat strong Webster University team, improving 10-5-3 under first-year head coach Wendy Tiller.
- For more, see Sports, Page 6.
Mertha named recipient of Harbison fellowship

By GERRY EVERSING

Andrew Mertha, Ph.D., assistant professor of political science and of International and Area Studies (IAS), both in Arts & Sciences, has been named the Earle H. and Suzanne S. Harbison Fellow. The fellowship provides financial support for three to a talented junior faculty member in Arts & Sciences.

Andrew Mertha, the third holder of the Earle H. and Suzanne S. Harbison Faculty Fellowship,” said Edward F. St. John, Ph.D., executive vice chancellor and dean of Arts & Sciences. “Andrew does very exciting work on international trade, particularly within the context of contemporary China, and he is being recognized for his accomplishments in his research and in the classroom. His expertise in China will be significant as the University builds even stronger connections in Asia.”

Mertha joined the faculty in July 2001 after earning a doctorate in political science at the University of Michigan. His scholarly interests include international trade, policy implementation and enforcement, intellectual property rights and political institutions, and intellectual property and trade, policy implementation and enforcement.

In Arts & Sciences, Mertha serves as a fellow at the Center in Political Economy, as an academic adviser for the Visiting East Asian Professionals program and as a participant in conferences held by the Center for New Institutional Social Sciences.

He teaches “Crossing Borders: I,” a core course in the new curriculum for IAS, a program that helped recruit him to the University.

“Andy has been a real asset for the IAS program,” said James V. Garbarino, Page 6

University College rolls out online registration

System will automatically grant employee tuition remission

By ANDY CLENDENEN

You want to take classes at University College in Arts & Sciences, but you can’t get away from work during normal hours to complete your required paperwork?

Problem. University College is implementing a new registration system.

Effective Nov. 28, registrations will be accepted via WebStac.

Current evening students will use their Social Security number or student ID number and their temporary PIN. This temporary PIN will be changed to a permanent number after the registration has been completed.

This is similar to what other universities do, but regular day students will continue to register for Spring 2003 University College courses through WebStac.

University College registration for evening students will have a little kicker this time.

“When you finish with your registration, you have to have a payment method,” said Katrina Truman, director of admissions and marketing for University College. “Our Web site is a portal into the traditional Webstac pro-
gram. So students come into our Web site and select courses, and once they have the courses they want, they go to a registration/ billing system on our secure site. They can choose to use online credit cards, or we are working on e-checks, which isn’t quite ready yet. Or they can go ahead and reg-
terate their hold registration, and we’ll send a check or bring a credit card to class, or come in to our office with a check or credit card.”

Employees at the University who are eligible for tuition remision can register, and the system will recognize them as employees and allow them to process at 100 percent graduate and 50 percent for graduate. But the key is that no registra-
tions will be processed until payment is established.

The benefits are multiple, and Truman highlighted two of them.

“The benefit for the student is that it’s real-time registration,” she said. “In the past, people would mail or fax their registra-
tions, and then we would turn them in, and once we had them, we could get them into the system. Some courses closed dur-
ding that time.

“The system will be very, very close to real-time registration. They’ll receive an e-mail confirming that the registration has taken place. They receive payment online — all they do is set up their number immediately what they are taking.”

And the other benefit is that the student will be the one con-
trolling data input. No longer will they, the University College administrators have to decipher various handwritings and smudges from the fax machines.

“Brand-new students to University College will key in all their data and basically create their own record,” Truman said. “They address, their Social Security number — everything will appear exactly as they input it.

“It should be a more secure system for them.”

Employee health & wellness is focus of seminar series

By ANDY CLENDENEN

In an effort to promote health and wellness among Hilltop Campus staff and faculty, the Office of Human Resources is introducing a breathing lunch seminar series called “Wellness Connections.”

Six programs are scheduled through the end of the academic year.

The first lunch is at noon Nov. 21 in Mallinckrodt Student Center, Room 100A. Connie A. Dickman, director of University nutrition, will speak on “How to Eat Healthy During the Holidays.”

“We’ve been working on this program for almost a year, and the goal is to promote good health through a balance of healthy food products and good health, to help employees find work-life balance,” said Judy Rush, director of employee relations in human resources. “One of the ways to do that is to offer educational programs.”

Other lunch topics include a smoking cessation program, safety tips for outdoor sports and stressless workdays.

“You aren’t going to want to be one of the most people to be unwell,” Goofe-Rush said. “We want to provide this seminar and just get information out to people.”

Another goal of the program is to provide a communication mechanism. There are a lot of activities on campus that we don’t always know about, like group exercise programs, dis-
counts available from BJC’s health club or the YMCA, so the Wellness Connection Web site will pull those resources together and provide helpful information all in one place.

In the future, information about the Wellness Connection, call 933-8506 or go online to the web site, follow the “Benefits” link and click on “Wellness Connections.”

Needy families campaign provides chance to help

The Office of Student Activities (OSA) has announced that for the second straight year it will be partnering with the United Way’s 100 Needy Families Case program to help provide holiday gifts to St. Louis families in need.

This year’s campaign is titled “Give Thanks Give Back.”

Faculty and staff are encouraged to participate by adopting an individual or a family, and purchasing a gift or donating money.

Picturing Our Past

The third annual Peace Day, in 1936, featured this demonstrator on campus, a keynot speaker and a 70 vehicle motorcade through the western part of the St. Louis region, including parts of the Hilltop Campus. The peace movement ended more than 40 years later when World War II engulfed Europe, but the movements still managed to maintain a presence until Pearl Harbor.

Today, for many years, celebrations of Armistice Day (now known as Veterans Day) have been held, with special events in honor of those who served. Washington University in St. Louis is celebrating its 150th anniversary in 2003-04. Special programs and events will be announced as the yearlong observance approaches.
Academic Women’s Network receives award

BY DIANE DICK WILLIAMS

The Academic Women’s Network (AWN) recently received the 2002 Women in Medicine Leadership Development Award from the Association of American Medical Colleges (AAMC).

The award, which was presented at the AAMC’s national meeting Nov. 10 in San Francisco, recognizes a woman or organization for outstanding contributions to develop female leaders in academic medicine.

"AWN is honored to receive this prestigious award from the AAMC," said Janet Rader, M.D., associate professor of obstetrics and gynecology and AWN president.

"It has been through the outstanding efforts of the women of AWN that improvements have been made in the professional environment of women and men in academic medicine at the medical campus.

A group of women formed AWN in 1991 to promote professional and social interactions amongst female faculty at the School of Medicine. The group hoped to discover and support mutual goals and to assist junior faculty and trainees in the pursuit of their goals.

"Since its founding, AWN has made major contributions to the School of Medicine," said William A. Peck, M.D., executive vice chancellor for medical affairs and dean of the medical school.

"The many changes it has brought to the campus have been substantial indeed and will be recognized by the graduates for many years to come. The quality of faculty life and the professional success of the program are举证 of the success of AWN," Dietz said.

From its inception, AWN made it a priority to work with medical school administration on issues of concern, which include family leave, gender equity and the composition of search committees.

When AWN was founded, the department’s search committees were composed entirely of department heads and junior faculty, all of whom were men.

AWN brought the roster to the attention of Peck, and he responded by opening the chair search committees to women.

In 1997, Peck also established the Teaching Excellence Awards. Since then, the Teaching Excellence Awards have been given to more than 150 women.

"I believe these methods will transform not only neurobiology, but also immunology and studies of organs," said Jeff W. Lichtman.

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"I believe these methods will transform not only neurobiology, but also immunology and studies of organs," said Jeff W. Lichtman.
The Israeli-Palestinian conflict is, at least in part, the story portrayed by a Jew, and if you think about it, there is the personal and national — begin to rise.

At one point, Samira has fallen in love with an Israeli law student and turned exclusively to writing. The play was produced in 1983 when the Haifa theater that operated in the same name.

The Jerusalem Theatre, where he became playwright-in-residence to — one another's stories.

The play was based on Frank's book Vater, Father, who was Hitler's gover-

ment and infectious diseases, Harvard U. of Wis., Madison. (Coffee, 3:45 p.m.) Compton Hall, 935-6200.

The German premiere of the play was followed in the same year, and was chosen by Theatertage Deutschland for best play of 1983 and was being nominated for an Olivier Award.

Ghetto has been translated into more than 20 languages and produced in more than 25 countries. In 1995, Sobol collaborated with Nilsa Frank in writing a scenario for a film event based on Frank's book Der Ghetto, which was commissioned by the German Film Board and performed at the Theater an der Wr.
Theatre de la Jeune Lune brings Hamlet to Edison

BY LIAM OTTEN

The inked figures circle bare branches, leaves, and stage flats, rippling over twin balustrades, 29 black and gold.

So begins Theatre de la Jeune Lune's elemental and visually stunning interpretation of William Shakespeare's Hamlet, which continues as part of the Theatre de la Jeune Lune's national tour and runs through Nov. 23.

Theatre de la Jeune Lune, or Theatre of the New Moon, is dedicated to presenting theatre in the most traditional manner, by looking for the new in the old. "First, the troupe has joined forces with guest director Mike Hayter of France's renowned Touthern Traveling Theatre to fashion a lush, swift-moving and at times stark, production that echoes with the force and power of primal myth."

As ever, the story begins when the Danish prince, visited by the ghost of his father, discovers that the late king was in fact murdered by his uncle, who has since assumed the throne and married the late king's daughter. As ever, the result is a passionate, aggressive, and at times evocative way in which the actors' use of masks to portraying popular performance traditions from classical and classicalدل INevative ways.

"Children of Prometheus: Shakespeare's Dream," which won the 1993 American Theatre Critics' Association New Play award, was adapted and directed by Boston's Loeb Green Farm; the playwrights: Janice Houseman and Frank Germaini. The Handback of Notre Dame, and 3-5 p.m. Free admission. To get at the political nuance and Machiavellianism that shakes up the world of the play, however, it's a good idea to remember that the late king was in fact murdered by his uncle, who has since assumed the throne and married the late king's daughter.

Note: For more information, go online to transportation.wustl.edu, call 314-935-5060, or call Rhenda Kelty at 314-935-5060.

Program in Technical Assistance supported by GWB

BY JESSICA N. ROBERTS

The George Washington Business School's Social Work continues to increase its work in the state of Virginia through a newly established program, "Practical Assistance.

The program has a well-established relationship with social agencies in the state, and the program will be available to assist with the implementation of the program's services.

Under the direction of Barbara Levit, the program will provide assistance to St. Louis nonprofits through consultations, workshops, lectures, development programs and other strategies in order to build organizational and professional capacity and competency.

The program applies the resources and talents of GWB to the challenges facing nonprofits operating in the state. The program is a partnership between the nonprofit sector and the George Washington University, and is designed to better serve community needs.

The program will offer a range of services, including consultations, workshops, and training, to help nonprofits strengthen their programs and services. The program will also provide opportunities for research and evaluation, to help nonprofits better understand the needs of their communities and the impact of their work.

For more information, call 314-935-7138.
Drugs

Medicinal "smart bombs" could improve therapy
From Page 1

Recent advances in biotechnol-
ogy make it possible for a phar-
cist to profile a patient's genetic infor-
mation, taken during a biopsy, using DNA from a cell or tissue.

The new technology uses the DNA chip, which can identify unique genetic sequences from the pac-
senger RNA (mRNA). Messenger RNA encodes the genetic infor-
mation that codes for proteins. The chip can identify proteins that are missing or altered.

"The chip is a wonderful tool," said Dr. Madhukar Trivedi, assistant professor of psychiatry in the Mayo Clinic College of Medicine.

He added that the chip can help identify new drugs and lead to the development of new treatment options.

Trivedi said the chip can also be used to identify genes that are associated with certain diseases, such as cancer.

"We are just beginning to understand the genetic basis of disease," he said. "This technology will help us to better understand the genetic basis of disease and to develop new treatments.

Harbison

--- From Page 2

Wertsch, Ph.D., IAS director and
the Marshall S. Snow Professor in
Arts and Sciences, said Mertha has been a great job in the classroom, and he's been a real plus for the faculty in the planning of IAS programs and projects.

As a native of New York City, Mertha earned a bachelor's in psychology and a master's in psychology from the University of Michigan in 1987.

He studied Mandarin Chinese at the University of Illinois and at Schuon Teacher's University in China.

He worked in Shanghai and Hangzhou, where he was a US tourist in dealings with Chinese officials and factory managers.

Mertha has lived in China for six years.

In 1988, Mertha began 14 months of dissertation research in music in China and proceeding across China. His dissertation explores factors that set the negotiation agenda for the intellectual property trade dispute between Washington and Beijing in the mid-1990s and subsequent patterns in intellectual property enforcement in China.

Last year, Mertha began a sec-
dond year of examining the dissemi-
native (re)centralization of several Chinese government bureaucracies in the late 1990s.

Mertha is recognized with teaching awards, a Center for Chinese Studies end-
owment award from the University of Michigan and a Fulbright Fellowship from the US Department of Education.

Mertha is a member of the Heilbrunn Institute in 2001 and the ArtSci Council's faculty award in 2002. He is a member of the Grimm Fellowship in 2001 and the Wiegand Fellowship in 2002. He is a member of the 1999-2000 McMillan Lab.

Mertha has been a recipient of the 1999-2000 McMillan Lab.

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Smith named managing director for Fudan E.M.B.A. program

By Robert Batterston

Michael J. Smith has been named managing director for the Fudan Engineering Management (E.M.B.A.) program, which provides training to students from the Olin School of Business and Fudan University in Shanghai, China, announced Olin School Dean Stuart L. Greenbaum, Ph.D. The E.M.B.A. program partnership was launched in Shanghai earlier this year.

Smith, who earned a master of business administration from the Olin School, joins his alma mater almost a year after his wedding. He is positioned at the intersection of several fields, each of which includes a tradition of research on improvisation and conversation.

In sociology, researchers such as conversation analysts have long studied how face-to-face conversations in a social setting can promote creative and original dialogue. In folkloristic and liminal anthropology, researchers have begun to emphasize the importance of creative performance.

In psychology, contemporary phenomenology has begun to account for the role of improvisational behavior in everyday life, such as caregiver-animal interactions. Even in computer science, researchers are discovering the importance of control in performance.

Sawyer spent two years as a professor at the University of Chicago in the early 1990s, and he has led a number of projects throughout the developing world. He is interested in how different cultural contexts influence creativity and communication.

Sawyer

Improvised Dialogues: Emergence and Creativity in Conversation

Sawyer

(2002, Greenwood Publishing Company)

The theory focuses on the collaborative, improvisational nature of interaction, which is present in all linguistic interaction, the theory shows how these dialogues are related to all researchers that study verbal performance. Improvised Dialogues thus is positioned at the intersection of several fields, each of which includes a tradition of research on improvisation and conversation. In sociology, researchers such as conversation analysts have long studied how face-to-face conversations in a social setting can promote creative and original dialogue. In folkloristic and liminal anthropology, researchers have begun to emphasize the importance of creative performance.

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Oblatory

George I. Zahalak, 63; prof. of mechanical engineering

By Andy Clendeninn

George I. Zahalak, Eng. S.E., prof. of mechanical engineering, died Friday, Nov. 1, 2002, of complications from cancer at his home in Clayton. He was 63.

Zahalak spent many years conducting research that could someday assist bioengineers in developing artificial tissues and help doctors better understand diseases such as Parkinson's.

Professor Zahalak’s research was leading-edge in terms of how muscles behaved and it could also lead to helping many people who had muscle disorders," said David A. Peters, Ph.D., the McDonnell Douglas Professor of Engineering and chair of the Department of Mechanical Engineering. "He was a great professor in our department, he stood for excellence in academics, research and every area in which we were involved, and we will miss him."
The artistic scientist

Carmen S. Dence's expertise ranges from radiology research to dazzling dance performances.

Her thesis adviser at FSU was an organic chemist named Joseph D. Dence, Ph.D. Their relationship had been strictly academic. "Then I was married to a man who would meet again later in life and marry," she says.

The two had stayed in touch during his work as a radiologist and radiology professor, and they met again while he was driving through Columbus, Ohio, where she was working as a pharmacist and he was writing his dissertation. They began to date and eventually married. He was then working at the Department of Obstetrics and Gynecology at the University of Missouri-St. Louis, but was leaving soon to take a job at the Abadan Institute of Technology in Iran.

During his first months away, she sent him red roses, letters and even flowers from him. Then in the mail came an airline ticket — and the hope she would join him. She decided to go. "He told me that this would be more than just an adventure," she says. "I was going to mean something.

Shortly after her arrival in Abadan, the couple married. That was nearly 26 years ago. As Joseph's career flourished and he became a respected radiologist, Carmen's heart told her to look at the arts, "My heart told me this would be a good place. I was going to mean something."

"We left behind friends who had lost their homes. We have been separated from our family. We faced many hardships," Dence says. "But that was good enough for me. I love St. Louis." Carmen returned to Washington University when her husband, a professor of radiology, of molecular biology and pathology, and professor of the Oncologic Imaging Program at the Alvin J. Silman Cancer Center at the School of Medicine and Barnes-Jewish Hospital and Dence's longtime supervisor. "She's good in the lab, keeps up with the latest developments in the field and is a fun colleague."

Dence collaborates with investigators from many departments and participates in studies that involve PET imaging of the heart, brain, lungs and various cancers. Each project presents new challenges and opportunities to learn. "It's a real pleasure to work with a range of investigators, to understand their needs and determine how to fulfill them," she says. "We make a point to meet the needs of a study makes Dence particularly valuable to her colleagues, says Mark A. Mintun, M.D., professor of radiology and associate professor of psychiatry.

Carmen is outgoing and willing to talk honestly about ideas and problems," Mintun says. "At the same time, she is meticulous and thoughtful in the laboratory. Those are great qualities for solving problems, and that's important because our work truly requires a team effort."

The most fulfilling part of her work, however, comes from knowing she is helping people with serious diseases. "All of us in the program know that the different compounds we prepare will touch a human being. We are a real team, a real family.

"I always have tried to surround myself with people who are very positive, enthusiastic and encouraging," she says, and "I have been privileged to find many such people at Washington University. Their encouragement has contributed to my scientific and artistic development." And foremost among these individuals is her husband, she says. "He is my No. 1 fan for everything that I do."

Carmen Dence explains how to use a manneft to analyze radioactive drug metabolites to research assistants Datta Ponde (left) and Jie Zhang.