Newborn lungs
Respiratory illness focus of research effort
By Anne Enright Shepherd

Some newborns with severe breathing problems recover fully, while others can have lingering respiratory illness or even require a lung transplant to live.

New School of Medicine research could help physicians more quickly determine which infants will improve and which will worsen so that necessary therapy can be started as early as possible.
The work is being supported by two grants totaling $4.6 million from the National Heart, Lung, and Blood Institute.

One of the most serious forms of respiratory distress, for example, results from a lack of pulmonary surfactant, a substance produced by the lungs that keeps them inflated during exhalation. Without enough surfactant, the lungs lose their elasticity, breathing becomes difficult and the infant may die.

In 1993, researchers at the medical school discovered the gene for surfactant protein B (SP-B), a key component of this important lung protein.

F. Sessions Cole, M.D., the Park E. White Professor of Pediatrics, and his colleagues will use a five-year, $3.6 million grant to look for genetic variations in the SP-B gene by the time they are born in Missouri in one year.

"We hope to identify one or more genetic variants that may one day be used to screen fetuses or screen prospective parents to find out whether one or both parents have mutations that might increase the risk of respiratory distress," Cole said.

The researchers will analyze DNA samples from 20,000 infants born in Missouri in one year.

Blood spots taken from each baby's heel at birth will be processed for the SP-B gene by the University's Genome Sequencing Center. For any found to have mutations in the gene for SP-B, medical charts and death certificates will be studied to determine the symptoms, progression of illness and, in some, age at death.

Similar genetic analysis on populations of children in Oslo, Norway, could result in a "best-selling book to take along on your next vacation."
Trinkaus to be named Hemenway professor

Edward S. Macias, Ph.D., professor of anthropology, will be named the Mary Tileston Hemenway Professor at Washington University in St. Louis. Macias, who earned his Ph.D. in anthropology at the University of New Mexico in 1973 and a doctorate in 1975 from the University of Pennsylvania, has been a professor of anthropology at arts & sciences since 1986.

“Professor Trinkaus is the world's most influential scholar of Neandertal biology and evolution,” Macias said. His major contributions to the Neandertals have no less than refocused the scientific study of them. He is also an excellent teacher, bringing his firsthand perspective to the classroom. “We are fortunate that he will be the first holder of the Hemenway Professorship, and I look forward to his continued good work in the years to come.”

Trinkaus earned a bachelor’s degree from the University of Wisconsin in 1968 and a master’s degree from Washington University in 1970 and 1973 and a doctorate in 1975 from the University of Pennsylvania. After a position as Regents’ Professor at the University of New Mexico from 1975 to 1980, he was appointed professor of anthropology in Arts and Sciences at Washington University in 1986.

Trinkaus’ research is concerned with the evolution of our genus as a background to understanding human diversity. In this, he has been particularly influential in the paleo-anthropology of late archaic and modern humans, redefining biological reflection on the nature, degree and patterning of the biological and cultural shifts between these two halves of Pleistocene humanity. His research includes considerations of the “origins of modern humans” in terms of the paleoanthropological record, and reevaluations of the archeological record, and of human paleo-anatomical variation. It has been particularly through the analysis of human fossil remains that Trinkaus has sought to shed light on these issues. This research involves the analysis of the fossil record, anatomy, life history patterns, and lesions of these paleohumans to assess differentials and patterns of activities and stress. Most of these analyses are concerned with the Neandertals and their ancestors, employing them as a mirror against which to view modern human biology. Trinkaus’ research has expanded in the past decade to focus on the vanishing and very early modern humans, as well as Neandertals and as a framework to understand what it means to be "modern." Trinkaus’ contributions to his field were recognized in 1996 when he was elected to the National Academy of Sciences. In his writings, his research papers quickly become part of the popular media.

Trinkaus is also an active and lauded teacher. His courses include classes on human paleontology, human functional anatomy, human paleoanthropology, human paleoarchaeology and human paleoanthropology. A resident of Boston, Mary Tileston Hemenway gave a generous gift to the Fledgling University as the result of a fund raising meeting in 1862 by William Greenleaf Eliot. The Washington University Board of Directors then established in 1864 the Eliot Professorship of Political Economy in support of the students.

To be a scholar of the human past, Trinkaus has been able to attract the kind of intensive critical development that he and the Neandertals and as a framework to understand what it means to be "modern." There really is no other way to do this. His research involves the analysis of the fossil record, anatomy, life history patterns, and lesions of these paleohumans to assess differentials and patterns of activities and stress. Most of these analyses are concerned with the Neandertals and their ancestors, employing them as a mirror against which to view modern human biology.

Architects propose a ‘think tank’ for urban design

By Lenn Otten

In many respects, Brentwood, Mo., is the West End. Opposite end of the urban sprawl spectrum, Brentwood, one of the least densely populated and most prosperous inner suburbs, is only a few minutes west of the St. Louis city limits along U.S. Highway 40/ Interstate 44, while Swansea, a small farming village, rests on the other side of the Mississippi River some 14 miles southeast of downtown.

Yet in recent years, Swansea has begun to attract the kind of intensive critical development that Brenntwood, home to the Saint Louis Galleria and other “big-box” retailers, has known for decades. National chain stores are sprouting up along the town’s main traffic artery, and older homes are being outfitted by newer developments. And while Brentwood is currently planning a new Metrolink light rail station, Swansea recently opened one.

All of which makes the pair a perfect point-counterpoint for the School of Architecture’s inaugural Master of Urban Design (MUD) studio. Launched this fall with 12 students, the MUD program will be a kind of “academic think tank” for regional urban planners, offering both a one-year post-professional degree and a dual Master of Architecture/Master of Urban Design.

“Architects today work on larger and larger scales, and they have to be able to look beyond the boundaries of a specific site,” said architecture Dean Cynthia Wiese. “They need to be able to see the whole picture, and that includes things like transportation, landscape design and environmental planning.”

Led by assistant professor Jacqueline Taison, who directs the program with fellow assistant professor Tim Franke, the inaugural MUD studio had six students create design plans for the areas surrounding the Brentwood and Swansea metro stations. After months of work, a variety of ambitious programs have emerged, ranging from comprehensive residential and commercial developments to urban parks and playgrounds.

“People who come to town, shop, and park, which have been thought of as commodities, perceptually, as part of transportation, landscape problems than, say, that suburban phenomenon, the suburban parking lot. “We always think of parking lots as residual spaces, yet they’re really this new kind of hybrid that we all have to learn to walk through from the time we’re kids,” Taison said. “My daughter is 7, and she already knows how to walk through them — stay to close to mom. The conventions are part of our way of life.”

“The question is, how do you make these kinds of spaces, which have been thought of purely in terms of consumption or harness, which are actually, sensually more vital?” Taison concluded. “We truly believe that there are opportunities for creating a heightened sense of social interaction, that a ‘public realm’ however amorphous that definition, is possible. It’s just that nobody has ever constituted it in these environments before.”

Homeless security Missouri Gov. Bob Holden (right) speaks while Tim Daniel, Missouri’s special adviser of homeless security and chair of the Missouri Security Panel, listens at the panel’s Jan. 25 meeting at Holmes Hall in Robert’s Hall, the meeting was the last of four statewide sessions on homeless security and anti-terrorism preparedness. The panel is made up of state and local officials and private citizens charged with assessing Missouri’s contingency plans with respect to both preventing and responding to terrorism and to make recommendations based on the assessment.
Neurofibromatosis gene change affects tumors

By Joe Dittmer

Tiny changes in the cells of patients with neurofibromatosis (NF) seem to contribute to formation of aggressive tumors and could help explain why the disease — which predisposes patients to develop tumors — affects people in different ways.

Reporting in the January issue of the American Journal of Human Genetics, investigators in the Sanders-Brown Center on Developmental Disabilities describe a small, molecular variation in some tumor samples taken from neurofibromatosis patients.

"Neurofibromatosis is a curious, inherited, rare disease that affects about one in 3,500 people," said principal investigator Nicholas O. Davidson, M.D., associate professor of medicine and of molecular biology and pharmacology and director of the Division for Gastroenterology. "The gene responsible spans a large region of chromosome 17, but we have found that only very small changes in the NF gene's messenger RNA (mRNA) can inactivate the first copy of this gene, a protein called neurofibromin.

"Neurofibromin suppresses tumor development. When it is inactivated, its tumor-suppressing effects on the body's normal cells are neutralized. The reason is that some of the NF gene's messages are shorted, and if you have a short copy of a gene, you can't use it," Davidson said.

Researchers in Eugene, Ore., first observed such C-to-U editing, an abundant gene expression in the human gastrointestinal tract. A gene normally made in the small intestine, called apolipoprotein B, is absolutely required for lipid transport.

This process in effect turns the neurofibromin tumor suppressor, making patients vulnerable to tumor formation. Davidson and his colleagues first observed such C-to-U editing in an abundant gene expressed in the human gastrointestinal tract.

A gene normally made in the small intestine, called apolipoprotein B, is absolutely required for lipid transport.

"This is the first attempt to develop a treatment that, when a tumor is malignant, triggers fat absorption," said Kenneth Kormos, M.D., a professor of neurology at the University of Kentucky College of Medicine and of molecular biology and pharmacology and director of the division for gastrointestinal medicine.

"The evidence that RNA editing is the same in both the gut and in tumor tissue comes from the presence of an enzyme called apobec-1 (apolipoprotein editing catalytic component). Usually spotted only in the gut, Davidson and his colleagues discovered apobec-1 in nerve sheath tumor samples taken from patients with neurofibromatosis.

"The evidence that RNA editing is important in the tumor is the fact that we can inactivate the neurofibromin tumor suppressor in some patients, with neutralizing effects," he said.

Another complication involves medication. "A lot of medications used to treat Parkinson's disease and symptoms might have disadvantageous side effects, making Parkinson's symptoms worse, or to protect patients from those side effects, the drugs are given at too low a dose to effectively treat the disease." Kormos is investigating a new treatment called transcranial magnetic stimulation (TMS), which involves placing a magnet on the head and stimulating key regions of the brain with electromagnetic fields. Unlike another depression treatment, electroconvulsive therapy (ECT), TMS does not require anesthesia, so patients can eat and drink what they want before treatment and can drive themselves to and from appointments.

TMS has had some success as a depression treatment, and it even helps temporarily alleviate some Parkinson's disease symptoms.

"With any treatment for depression — whether oral or parenteral — we want to know whether the drug will work, and we're finding that with TMS, sleep also is the first symptom Parkinson's patients want to have relieved. To be eligible for the study, participants must be at least 18 years old and have Parkinson's disease and symptoms of depression, such as sleep problems, extreme sadness or loss of interest in things that were doing before. TMS involves feeling nervous can be a symptom of depression.

"After an initial evaluation, study subjects will receive the investigational treatment every afternoon, Monday through Friday, for two weeks. Volunteers receive treatment as outpatients. Each visit will last approximately 45 minutes, except the initial evaluation, which may take an hour or more. Participants will receive screenings, an exam, EKG, laboratory testing and TMS treatment free of charge. The TMS device is not yet approved by the Food and Drug Administration (FDA) for use as a treatment for depression, but the FDA has approved using the device in research to determine whether it will be an effective depression treatment.

For more information, or to volunteer for the study, call toll free (866) 252-2700.

Lungs

Respiratory studies may help newborns

From Page 1

Norway: Seoul, South Korea; and Cape Town, South Africa, will allow investigators to estimate the frequency of SP-B mutations in different ethnic groups and geographic areas.

"This is the first attempt to do genetic risk assessment for respiratory distress."

P. Sessions Cole

led by Aaron Hamvas, M.D., associate professor of pediatrics.

He, too, will investigate pulmonary surfactant deficiency but from a different perspective. Hamvas' research compares babies with normal lungs to those with abnormal lungs in an effort to find differences in surfactant production. He will study three groups: premature infants under one year old with lung disease and premature lung defects and normal lungs who are on mechanical ventilation for other reasons.

By measuring fluid production from each baby's weight in grams and chest expansion, Hamvas aims to determine how surfactant is produced and used differently in the body of a baby with lung disease than in one with normal lungs.

His research could lead to treatments to restore lung function in infants with respiratory distress syndrome. Cole and Hamvas are physicians at St. Louis Children's Hospital.

Volunteers needed for depression, Parkinson's disease study

Investigators in the School of Medicine are seeking volunteers for a research study for patients with Parkinson's disease and depression.

Many patients with Parkinson's disease get depressed, but the problem can go unrecognized. The reason is that some of the symptoms of Parkinson's disease — such as slow movement and difficulty making facial expressions — are also symptoms of depression.

Another complication involves medication.

"A lot of medications used to treat Parkinson's disease are not as effective as those who also have Parkinson's disease," said Theresa Kormos, M.D., professor of medicine and of mental health clinical medical nurse specialist in the Department of Pediatrics. "Hitterally, being born prematurely has been the principal way to determine whether or not an infant will have respiratory distress.

"If a baby breathe fast for the first few days of life, that condition will not improve with time, and that has important implications for prognosis and treatment."

The second research effort, funded by a $1 million grant, is a longitudinal study of health and aging that involves more than 670 American members of the School of Sisters of Notre Dame religious order.

The talk, titled "Agging with Grace: Findings from the Nun Study," is part of the seminar series by the medical school's Alzheimer's Disease Research Center.

For more information, call 286-2881.
Catherine civil rights lawyer Morris Dees will give a talk, "A Passion for Justice," at 11 a.m., Feb. 6, in Graham Chapel as the Benjamin E. Youngdahl Lecture for the Assembly Series. Throughout his career, Dees has been a defender of victims of hate crimes. As chief trial lawyer and co-founder of the Southern Poverty Law Center, Dees specializes in lawsuits involving civil rights violations. He has won numerous landmark cases, many of which were multimillion-dollar settlements against groups including the Ku Klux Klan and the Aryan Nations and radical militia groups. The Southern Poverty Law Center’s goal is to make profit organizations that maintain a pool of professional attorneys, civil rights violations and hate crimes. In 1980, Ford established a landmark case in this area.

Dees is also the author of two books: "Guttering Storm: America’s Militia Threat and Heaven on Trial: The Case Against America’s Most Dangerous New Religion." Dees was also a pivotal figure in the Baptist Church in South Carolina — the largest award ever given in a civil case.

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Poet Ni Chuilleanain is reading for WritePRG Series

Ni Chuilleanain is the most important woman poetwriting in Ireland today, said Gaunt Batten, Ph.D., associate professor of English in Arts & Sciences. "As one scholar has recently noted, more than perhaps any other Irish writer she is at once familiar with what has been called "Golden Ireland;" with its links to Gaelic language, history and culture, and also with European culture at its most cosmopolitan. "Where Javan Roland, a much better-known Irish poet, claims to speak as a subject for the women who have been made into objects by her poems by Irish males, Ni Chuilleanain prefers to let those silenced by history as well as by art emerge as surveland vividly. The poet's poetry of half-secrets, hallucinations, is scavenged in its control of voice but also continuously startling." Ni Chuilleanain was born in Cork in 1942, the daughter of a novelist, and a college professor. She graduated from University College Cork in 1962, later studied at Oxford University and currently teaches at Trinity College in Dublin, where she founded and co-edits the literary journal Cyphers with husband MacDara Wood.

Ni Chuilleanain's latest collection is The Girl Who Married the Render, published in January by Wakefield Press

University Press: Previous books include The Plough Serpent (1995); The Magdalene: Women and Bardic Poems (1989), named one of the three best poetry books of the year by The Irish Times/he Lingua: Poetry Book Prize Committee; The Rose Cenotaph (1981); Site of Ambush (1975); and Aisce Mhbonnais (1966), winner of the Patrick Kavanagh Award. Recently, several of her works were anthologized in The Wade House and in Winter won a 13th streak to 15 games.

Women's hoops home win streak stays intact
Washington U. continued its women's basketball and the 61-44 victory against Rochester Jan 25 and Carnegie Mellon Jan 27. The Bears, 16-4, have won six straight at home; the team is 100 percent and the 64 freethrow, while junior diver Ryan Byrnes contributed to their 100 percent and NCAA Division I provi- sions. The Bears' conference season is 102-meter and three-meter boards. Track wins 10 events at Midwest Pentathlon

Sports

University College rolls out Saturday Seminars

Men's hoops continues best season ever
The Bears beat the University of Rochester (65-48) Jan 25 and Carnegie Mellon University (76-72) Jan 27. The wins gave the men (17-7) sole possession of first place in the University, Athletic Association and the 17th and 19th Centuries; "The goal of the Saturday lecture is to make the audience as wide an audience as possible," said Carroll Hilles Balot, Ph.D., assistant dean for graduate programs at University College. "We want to give Washington University faculty and community an opportunity to see what we are doing in University College and in the MLA program. And I think that is a great way to spread the word that we are doing here." The Saturday lecture series benefits several people. "The goal of the Saturday lecture series is to open University College and the MLA program to as wide an audience as possible," said Carroll Hilles Balot, Ph.D., assistant dean for graduate programs at University College. "We want to give Washington University faculty and community an opportunity to see what we are doing in University College and in the MLA program. And I think that is a great way to spread the word that we are doing here." The Saturday lecture series benefits several people. "The goal of the Saturday lecture series is to open University College and the MLA program to as wide an audience as possible," said Carroll Hilles Balot, Ph.D., assistant dean for graduate programs at University College. "We want to give Washington University faculty and community an opportunity to see what we are doing in University College and in the MLA program. And I think that is a great way to spread the word that we are doing here." The Saturday lecture series benefits several people. "The goal of the Saturday lecture series is to open University College and the MLA program to as wide an audience as possible," said Carroll Hilles Balot, Ph.D., assistant dean for graduate programs at University College. "We want to give Washington University faculty and community an opportunity to see what we are doing in University College and in the MLA program. And I think that is a great way to spread the word that we are doing here." The Saturday lecture series benefits several people.

And more...

Worship

Friday, Feb. 8
11:15 a.m. Catholic Mass. Catholic Student Center, 6322 Forsyth Blvd. 935-8791.

Saturday, Feb. 9
7:30 a.m. Continuing Medical Education forum. "Critical issues in the Management of Hypertension and Lipid disorders as defined by the Cardiovascular Imaging and Clinical Risk Assessment Group," 17th and 19th Buildings, 935-7429.

Sunday, Feb. 10
11:15 a.m. Catholic Mass. Catholic Student Center, 6322 Forsyth Blvd. 935-8791.
Career Week gets under way Feb. 4

**By Neil Schoenberr**

For many students, the process of finding a career and looking for a job can be a daunting experience. However, the Career Center hopes to make the process easier for students with its annual Career Week.

Career Week kicks off Feb. 4, consists of a variety of panels and programs aimed at helping students to reach their career goals. This year’s theme is “Exploring Careers: The Important Milestone.” The primary focus of the event will be on exploring careers from a variety of different fields.

“We have a number of panels coming from an associated cadre of outstanding development bio- logists to make significant contributions to the field,” said Amy Simmons, project coordinator at the Career Center. “The program will enable students to explore numerous careers and look at new job opportunities that they may not have known existed.”

The panels will work in areas as diverse as the environment, public relations, the arts, health care and business to corporate sector.

“The panels will discuss what they do, how they got started and how to get a job in their area,” Simmons said. “They will offer suggestions and advice on finding the best fit for their career path.”

Skill-building seminars will be offered on resume writing, networking, understanding benefit packages and more to help students prepare and negotiate an offer.

Career Week will be the Interdisciplinary Kaleidoscope, held from 2-3:30 p.m. Feb. 8 in McMillan Cafe in McMillan Hall. The kaleidoscope will include a multifaceted look at internships from a variety of perspectives — student, employer and faculty member.

“We want students to know about ‘going pro,’ how to find an internship, and get prepared for their career,” Preview list of summer 2002 opportunities.

“It should be a great event,” Simmons said. “The workshops and the seminars are designed to be very well attended, and this year we have the best excellent lineup of panels.”

All events are free and open to all students University, but an RSVP is required for each event. Please consult the complete listing of all events, times and locations, as well as additional details. For more information or to RSVP, call 935-9590.

This year’s theme is “Exploring Careers: The Important Milestone.” The primary focus of the event will be on exploring careers from a variety of different fields.

**Gutenberg**

—from Page 1

renowned collector of books, manuscripts, prints and paintings. He was president of the St. Louis City Council from 1909 to 1913.

A descendant of Gundelich recently returned the leaf to the University.

Gundelich’s invention of movable type and printing production of books, which in turn caused the dramatic informa- tion to be freely and widely circulated in the world. In addition to breaking new ground technologically, the Gutenberg Bible is internationally preserved for the intricate crafts- manship and beauty of its creation.

“We try to add works that are important milestones in printing,” said Anne Posega, head of Special Collections.

The idea was hatched over a cup of coffee at the offices of the School of Art and director of the Cranbrook Institute of Science. “From a historical point of view, it is amazing that this process re- mained stable for hundreds of years. This leaf has helped us study the changes in the typographic and its identification with literature.”

“I’m a printer, so I have something that tekks to my general interest. I think that individuals who will experience typing images and its potential value,” said Kenneth E. Bobrick, associate professor of bio- logical studies.

The study is based on a unique analysis of a series of life tables constructed from the Panel Study of Income Dynamics (PSID). The PSID is a nationally representative sample of households and was first interviewed annually since 1968.

The official poverty line was used to measure poverty, while affluence was defined as at least 10 times the poverty line. For example, the poverty line for a family of three in the United States is $13,738 per year, consequently, for such a family would be $137,380 per year.

**Poverty**

—from Page 1

The School of Law’s Institute for Global Legal Studies will co-sponsor a lecture by the Whitney R. Harris Institute for Global Legal Studies at 4 p.m. Feb. 7 in the Bryan Cave Moot Court Room in Anheuser- Busch Hall.

Chancellor Mark S. Wrighton and Joel Seligman, J.D., dean of the law school and the Ethnics A.H. University Professor, will kick off the event. The ceremony’s keynote speech, “The Future of Atrocity Law and the Legacy of Whitney Harris,” will be delivered by Ambassador David J. Schell, senior fellow at the United States Institute of Peace in Washington, D.C., and former ambassador at large for war crimes issues and head of the U.S. delegation to the United Nations Preparatory Commission for the International Criminal Court.

The lecture will follow at 5 p.m. University faculty, staff and students may attend the event. For more information, visit law.wustl.edu/initiative.

**Hilltop Campus**

— from Page 1

create more integration among science.

The idea was hatched over a cup of coffee at the offices of the School of Medicine, Losos out of Arts & Sciences.

The likelihood was not great that the old friends would be able to collaborate until they learned of the special Packard Foundation Grant program and began forming a team.

The beauty of the program is that it allows people who might normally not be able to work together virtually to actually come up with a plan that draws upon the strengths of different informa- tion, Losos said. “For instance, I’ve done lots of work in evolution, but they have the most unraveled questions from my work need a devil’s advocate, so it’s been great.”

There is not much genetic difference between humans and chimpanzees, Losos explained, but biologists agree that the big difference between the two is that somehow there have been changes that affect the developmental process so that the outcome during development is a different organism. The most basic understanding of evolution requires an under- standing of how DNA actually changes in order to affect the embryo and develop the 20th-century printing, but the Gutenberg leaf takes us back to the beginning of modern printing technology.

A Gutenberg leaf is so desirous it is one of the rarest treasures in the libraries’ respected collections for a higher level.

To see the page

In plants living in the leaf and the leaf is rank along- side the Latin and German editions of the Nürnberg Chronik and Galilei’s Dialogue of the 1632, both also hand- written Special Collections.

The timing of this acquisition comes just as Gutenberg is back in the news, as scholars debate the exact methods.

Gutenberg used for making its type.

This is the very beginning of typographic,” said Kenneth E. Bobrick, associate professor of biological studies.

The idea was hatched over a cup of coffee at the offices of the School of Art and director of the Cranbrook Institute of Science. “From a historical point of view, it is amazing that this process re- mained stable for hundreds of years. This leaf has helped us study the changes in the typographic and its identification with literature.”

“I’m a printer, so I have something that tekks to my general interest. I think that individuals who will experience typing images and its potential value,” said Kenneth E. Bobrick, associate professor of bio- logical studies.

The study is based on a unique analysis of a series of life tables constructed from the Panel Study of Income Dynamics (PSID). The PSID is a nationally representative sample of households and was first interviewed annually since 1968.

The official poverty line was used to measure poverty, while affluence was defined as at least 10 times the poverty line. For example, the poverty line for a family of three in the United States is $13,738 per year, consequently, for such a family would be $137,380 per year.

**Employment**

Use the World Wide Web to obtain complete job descriptions. Go to wu employment.wustl.edu or medstaff.wustl.edu/wonder (Medical).

For example, an experienced legal assistant may be needed to handle various tasks, such as managing cases and coordinating with clients. Therefore, knowledge of legal procedures and strong communication skills are critical. Knowledge of legal terminology and procedures are also necessary.

**Campus Watch**

The following incidents were reported to University Police, Jan. 23-24. Readers with information that could assist in investigating these incidents are urged to call 905-9555. This information is provided as a public service to promote safety awareness and is available on the University Police Web site of police.wustl.edu.

Jan. 23

7:38 a.m. — A person reported that a 12-volt cordless drill was taken from the Seam Shop in Mallinckrodt Student Center between 8 p.m. Jan. 13 and 8 a.m. Jan. 14. Total loss is valued at $1,050.

2:50 p.m. — A faculty member in Anheuser-Busch Hall reported that an unknown person obtained his laptop computer and used it to establish a credit line and make fraudulent purchases.

5:17 p.m. — A faculty member in Anheuser-Busch Hall reported that an unknown person took his IBM laptop computer from his office in Jolly Hall between 9 a.m. and 9 p.m. Total loss is valued at $1,500.

Jan. 24

11:45 p.m. — A student reported that a laptop computer was broken, a new sign was taken for a fire alarm, and items were taken from Mallinckrodt Mound House. Total loss is valued at $500.

Jan. 27

6 a.m. — A caller reported hearing a crash of glass and seeing a large male, approxi- mately 5 feet 10 inches, wearing a long curly brown hair and wearing a T-shirt, walking away on the east side of Nenney House. A window had broken the glass in a fire extinguisher box.

Additionally, a faculty member responded to two reports of property damage, two auto accidents, and one report each of disturbing the peace, reckless driving and juridical violations.
To press

A paper by Christopher I. Byrnes, Ph.D., dean of the School of Engineering and Applied Science and the Edward H. and Hettie D. Johnson Professor of Systems Science and Mathematics, and two co-authors, which appeared in the latest issue of the SIAM (Society for Industrial and Applied Mathematics) Review, received high praise from the journal's editors. The paper was titled "From Finite Covariance Windows to Modeling Filters: A Gauss-Kronrod Optimization Approach." Among SIAM Review's reviewers, "This algorithm has gone out of their way to outline a fundamental development — and to bring theory to life through well-chosen examples."

Of note

William J. Powers, M.D., professor of neurology and of radiology in the School of Medicine, recently was elected to a two-year term as president of the Association for Brain Imaging.

Trey Hawk, a second-year student in the George Warren Brown School of Social Work, was selected for a Pediatric Pulmonary Social Work Fellowship for summer 2002 at the University of Florida Medical Center in Gainesville, Florida. He will be part of an interdisciplinary team working with children with cystic fibrosis, life-threatening asthma, and other pulmonary diseases.

Eight gerontology concentration students in the George Warren Brown School of Social Work received Hartford Practicum Scholarships for 2001 and spring 2002. They are Natela Phashutiladze, Open Society Institute fellow; James Kettel, Marla Mazonova, Tina Leun Cloud, Ashley Brooks, Leon Cardoso, Leslie Klingender and Meredith Nelson.

Jeffrey L. Gordon, M.D., the Abraham Eisenfeld Professor of Molecular Biology and Pharmacology and professor of medicine in the School of Medicine, has received a five-year, $925,513 grant from the National Institute of Diabetes and Digestive and Kidney Diseases for research titled "Regulation of Gene Expression in the Small Intestine."

Emil R. Unanue, M.D., the Edward F. Albee Professor of Pathology and Immunology in the School of Medicine, has received a five-year, $325,523 grant from the National Cancer Institute for research titled "Training in Cancer Biology and Immunology."
Hunting viruses, training future scientists

Research by Herbert W. "Skip" Virgin, M.D., Ph.D., seeks to understand disease

BY DARRELL E. WARD

viruses manipulate the immune system during chronic infection. The event was one of many exciting and satisfying moments in Virgin's career as a researcher and teacher in the School of Medicine. Virginia was the University in 1991 from Harvard University, where he tested out of his freshman year. Magna cum laude in 1977 and entered Harvard Medical School's M.D./Ph.D. program under Emil R. Urasawa, M.D.

Doyle: Unamer is the Edward Mallinckrodt Professor and head of the Department of Pathology and Immunology at Washington University School of Medicine. After medical school, Virgin then entered Harvard's residency program at Brigham and Women's Hospital, followed by a fellowship in infectious diseases, which brought him to Washington University. He held a clinical appointment in medicine until 1996, when he made the difficult decision to give up clinical medicine and devote himself solely to research.

In every middle school, there is a child who knows that he wants to be a doctor or scientist. He grew up in southern Florida going to school, spearfishing and sailing. He comes from a sailing family, and his proficiency earned him the nickname "Skipper." He still sails during family visits to southern Florida.

Virgin's father was a trial attorney, and his mother was trained in chemistry. His grandfather, an orthopedic surgeon, regularly sought better ways to care for his patients. During the summer after his junior year in high school, Virgin received a fellowship from the American Heart Association that placed him in a chemotherapy lab at the University of Miami. There he explored whether it was possible to change the wavelengths at which certain chemicals fluoresced by fixing them to solid surfaces. By the end of the summer, he'd presented it at a scientific conference.

"That solidified my interest in science," he said.

Upon entering Harvard, he first attended, then taught biology classes. The experience cut short—temporarily—his desire to enter medicine.

"Biology didn't seem intellectually challenging. There was too much memorizing facts and not enough thinking about concepts." thought that's what biology is like, that's what medicine must be, he also did, and I lost interest in it completely.

He did enjoy teaching and research, however, and he became involved in a study of slime molds, a kind of fungus that crawls around like amoebas and eats bacteria. "I wanted to learn how these amoeboid cells move amoeboid bacteria," he said.

Then one day he read a review article of the book titled Games Jaunatais Play, which described tricks used by pathogens to avoid being killed by the immune system. That led him to read up on immunology, where he learned of immune cells called macrophages, which engulfamoeba-like through the body hunting bacteria and other pathogens.

"This carrot of the immune system re-kindled his interest in medicine and led him to enter the M.D./Ph.D. program." Another interest was ignited during this time, too. One night he and some friends went to a restaurant to listen to a cayman band. They ended up sharing a table with another group of young people they'd known from high school. Virgin began talking with the woman at the table. Her name was Joan Downey. They met once before, formally, at a ceremony where Virgin, president of the National Honor Society's local chapter, had placed the society's pin on Downey, the new inductee.

That solidified my interest in medicine and led him to enter the M.D./Ph.D. program.

"For me, it's also payback," Virgin said. "I've been very good students, and I wanted to give something back."

"Skip has a clear track record for recruiting and retaining women in scientific careers," Downey said. "As a professor and mentor, he has been a role model for me."

Currently, some of his postdoctoral students are venturing with him into risky scientific territory. Virgin recently directed his work toward isolating new pathogens from tissues of patients with diseases that appear infectious but have no known link to a virus.

"Pathogens discovery requires that you look hard and perhaps find nothing," he said.

But such efforts are important for advancing understanding of the role of viruses in human disease. Undoubtedly, Skip Virgin is the right person for the job.

University with a joint appointment in medicine and in pathology and immunology. Skip has successfully combined molecular virology with immunobiology. Unanue said: "Very few investigators can bridge both areas. In a relatively short time, he has become one of the top viral immunologists in the country. He is highly committed to his laboratory, to his trainees and to our department."

Virgin's longtime friend and colleague, Paul M. Allen, Ph.D., the Robert U. Koret Professor of Pathology and Immunology, described him as having a true passion for science. "Skip loves doing basic bench work," Allen said. "Every day, he figures out how to do experiments, he's competitive in a friendly way and can identify the critical questions and figure out ways to answer them." In addition, said Allen, "he's a good parent. Virgin and Downey have three children, White, 11, Bret, 9 and Jaelithe, 4. Virgin relaxes by taking his kids to soccer and basketball games, and he's an assistant coach for his sons' basketball team. He also enjoys reading serious science fiction, books that have something to give in science by writers such as David Brin. As a child, he read The Lord of the Rings 13 times — and as an adult, he enjoyed the movie. Integrating work and family is important to Virgin, both at home and at work. His laboratory includes areas for toddlers and for nursing mothers. Virgin wants his kids to get the best education. Among the most satisfying aspects of his job, he said, is seeing the men and women trained in his lab do well.

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