

## **NEWS RELEASE**

**Embargo: Tuesday, Jan. 20, 2004 4:00 EST**

**Contact:** Molly Portz, Academic Health Center, 612.625.2640

### **REDUCTION IN SMOKING MAY NOT ELIMINATE EXPOSURE TO CARCINOGENS**

MINNEAPOLIS / ST. PAUL (Jan. 15, 2004)—Smokers who substantially reduce the number of cigarettes they smoke per day are exposed to lower amounts of a potent tobacco carcinogen; however, the reduction in the amount of the carcinogen exposure is often transient and is not proportional to the reduction in cigarettes smoked. These study results appear in the January 21 issue of the *Journal of the National Cancer Institute*.

Cigarette smoking is the cause of 90 percent of the world's lung cancer cases, but it is not known whether smokers who reduce the number of cigarettes smoked per day also decrease their risk of lung cancer.

Stephen S. Hecht, Ph.D., of The Cancer Center at the University of Minnesota, and colleagues set out to answer this question by measuring the metabolites of a specific tobacco carcinogen in the urine of smokers who were part of a structured smoking reduction program. The carcinogen, 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone (abbreviated NNK), along with polycyclic aromatic hydrocarbons, are some of the most important tobacco carcinogens with respect to lung cancer.

The people in the study, who overall had smoked an average of 23.7 cigarettes per day, were randomly assigned to a reduction group or to a wait-list group. The 102 smokers in the reduction group gave two urine samples one week apart before reducing their cigarette consumption by 25 percent for two weeks, 50 percent for another two weeks, and then by 75 percent for the duration of the study. The 49 smokers in the wait-list group provided four urine samples over a seven-week period to provide a stable baseline measurement of the NNK metabolites, called NNL and NNAL-Gluc. These 49 smokers were then put on the same smoking reduction schedule as the reduction group. Patients were offered nicotine replacement therapy to assist their smoking reduction efforts. Urine samples were collected at several specific points throughout the study period.

Overall, there was a reduction in NNAL and NNAL-Gluc levels at nearly all of the intervals as smokers reduced the number of cigarettes smoked each day. However, the magnitude of the reduction was generally less than the reduction in cigarettes smoked per day. For example, smokers who reduced their cigarettes per day by 55 percent to 90 percent during weeks four through 12 had reductions of only 27 percent to 51 percent in total NNAL. Even when smokers reduced their cigarettes per day from a mean of 24.7 at the beginning of the study to 2.60 at week 12 (a reduction of 90 percent), the average level of total NNAL was only reduced by 46 percent.

The authors suggest that the most likely explanation for the results is that people who are trying to cut back by smoking fewer cigarettes per day alter their smoking behavior by inhaling longer and deeper, which is known to alter a smoker's exposure to carcinogens. "The results indicate that some smokers may benefit from reduced smoking, but for most the effects are modest, probably due to compensation," the authors conclude.

In a commentary in the same issue of the *Journal*, Paolo Vineis, M.D., and his colleagues—a team of epidemiologists who participated in a 2002 working group that prepared a monograph on tobacco smoking and secondhand smoking for the International Agency for Research on Cancer—review the evidence for a causal relationship between tobacco use and cancers not previously believed to be associated with smoking. They also summarize the causal association between cancer and tobacco use other than smoking cigarettes, such as bidi use and cigar and pipe smoking.

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Citations:

- Hecht SS, Murphy SE, Carmella SG, Zimmerman CL, Losey L, Kramarczuk I, et al. Effects of reduced cigarette smoking on the uptake of a tobacco-specific lung carcinogen. *J Natl Cancer Inst* 2004;96:107–15.
- Vineis P, Alavanja M, Buffler P, Fontham E, Franceschi S, Gao YT, et al. Tobacco and cancer: recent epidemiological evidence. *J Natl Cancer Inst* 2004;96:99–106.

Note: The *Journal of the National Cancer Institute* is published by Oxford University Press and is not affiliated with the National Cancer Institute. Attribution to the *Journal of the National Cancer Institute* is requested in all news coverage. Visit the *Journal* online at <http://jncicancerspectrum.oupjournals.org/>.

## NEWS RELEASE

**Embargo: Monday, Feb. 2, 2004**

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### **U of M RESEARCH INDICATES WHY RADIATION THERAPY REDUCES BONE CANCER PAIN New Findings May Pave Way for Improved Pain Relief Methods**

MINNEAPOLIS / ST. PAUL (Jan. 28, 2004)—Although physicians administer radiation therapy to relieve bone cancer pain in more than 100,000 patients each year in the United States, little is known about why the treatment works. Using an experimental radiation model, University of Minnesota Cancer Center researchers and colleagues have determined that radiation treatment may relieve pain by reducing bone tumor size and decreasing progression of cancer-induced bone destruction. The findings appear in February issue of the journal *Radiation Research*.

“Perhaps the greatest obstacle to improving pain relief following radiation of bone cancer is our limited knowledge regarding mechanisms responsible for decreasing the pain,” said lead investigator Denis Clohisy, M.D., professor of orthopedic surgery in the Medical School and Cancer Center member. “Future use of the experimental system described in this research should help accelerate the pace of discovery around these mechanisms and help efforts to reduce the burden of pain suffered by bone cancer patients.”

Researchers in this investigation created an experimental model that limited radiation to the site of cancer in mice and then used an established bone pain model, imaging techniques, and histologic evaluations to understand the effects of radiation.

The research demonstrated that a localized, single radiation dose decreased painful behavior and increased limb use, which was associated with a decrease in bone destruction and tumor burden. Treated mice demonstrated greater pain relief and had significantly less bone destruction and tumor burden than untreated mice. Recent studies have demonstrated that tumor burden and bone destruction each correlate with behavioral and neurochemical measures of pain.

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*Radiation treatment and bone cancer pain, page 2*

Co-authors of this study are Bruce J. Gerbi, Ph.D., Parham Alaei, Ph.D., Patrick W. Mantyh, J.D., Ph.D., Michael Goblirsch, B.A., Wendy E. Mathews, B.S., and Christine Lynch, B.S.

*The Cancer Center at the University of Minnesota is a National Cancer Institute-designated Comprehensive Cancer Center. Awarded more than \$80 million in peer-reviewed grants during fiscal year 2003, the Cancer Center conducts cancer research that advances knowledge and enhances care. The center also engages community outreach and public education efforts addressing cancer. To learn more about cancer, visit the University of Minnesota Cancer Center Web site at [www.cancer.umn.edu](http://www.cancer.umn.edu). For cancer questions, call the Cancer Center information line at 1-888-CANCER MN (1-888-226-2376) or 612-624-2620 in the metro area.*

—end—

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## NEWS ADVISORY

### ECONOMIC IMPACT STUDY ON MINNESOTA PARTNERSHIP FOR BIOTECHNOLOGY AND MEDICAL GENOMICS TO BE RELEASED FEB. 17

MINNEAPOLIS/ROCHESTER, Minn. (Feb. 16, 2004) – Mayo Clinic and the University of Minnesota tomorrow will release findings of a report commissioned to study the economic impact of the Minnesota Partnership for Biotechnology and Medical Genomics. Members of the Minnesota Legislature will be the first to hear about the economic potential of this Partnership through presentations to the House Jobs and Economic Development Finance Committee and to the Senate Environment, Agriculture and Economic Development Budget Division.

Pittsburgh-based Tripp Umbach Healthcare Consulting, a leading provider of comprehensive economic impact analyses for health care providers, universities, public health organizations and governmental entities, conducted the study and will present the findings to legislators on Tuesday, Feb. 17, at the Capitol.

**When:** Jobs and Economic Development Finance Committee: 8:15 a.m.  
Tuesday, Feb. 17  
Environment, Agriculture and Economic Development Budget  
Division: 12:30 p.m. Tuesday, Feb. 17

**Where:** House Committee meets in Basement Hearing Room, State Office Building  
Senate Committee meets in 107 Capitol

**Who:** Paul Umbach, President and CEO, Tripp Umbach Healthcare Consulting  
Frank Cerra, M.D., Senior Vice President for Health Sciences, University of Minnesota  
Academic Health Center  
Eric Wieben, Ph.D., Director, Mayo Clinic Genomics Research Center

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Twin Cities Campus

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## NEWS RELEASE

Embargo: 8 a.m. Feb. 24, 2004

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### **STUDY SHOWS WOMEN'S MEDICATION USE HIGHER THAN EXPECTED** ***Women unlikely to tell health care providers about all medications***

MINNEAPOLIS/ST. PAUL (Feb. 18, 2004)—Women's use of all medications—including herbal supplements—is higher than anticipated, and they're unlikely to tell their health care providers about the medications they take, according to a University of Minnesota researcher.

A study being published in the Feb. 24 issue of *American Journal of Obstetrics and Gynecology* determined that that health care providers need to spend more time asking about medication usage.

"We really need to inquire better about patients taking herbal and over-the-counter medications," says Timothy Tracy, Ph.D., a professor at the University of Minnesota College of Pharmacy, the University of Minnesota Center of Excellence in Women's Health and one of the article's authors. "The care providers need to ask, and patients need to tell. Neither one is doing a good job."

Among the more than 570 study participants, 92 percent took prescription medications, and 96.5 percent self-medicated with an over-the-counter medication. Furthermore, 59.1 percent of study participants used herbal supplements.

Researchers also found patients may not mention medications to the physician unless that physician had prescribed the drug. For example, patients did not always tell the gynecologist they were taking high blood pressure medication prescribed by another physician.

"Patients may not perceive that their blood pressure medication was something their gynecologist needed to know about," Tracy says. "Sometimes, patients don't associate their disease and medication with the individual physician they're seeing at any given time if the physician is not the one treating that condition or if they didn't prescribe the medication."

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Pharm.D. students interviewed study participants using a three-step process. Patients were asked open-ended questions about what medications they take. The interviewer then conducted a system-by-system analysis, asking patients whether they took any medications for situations such as headaches, upset stomachs or achy joints. The patients were then presented with a list of common medications—including prescription, over-the-counter, vitamins and herbal supplements—and asked whether they took any of those medications.

Researchers found that every set of questions uncovered additional medications patients didn't initially report. They also discovered that while a patient may report that she's taking a medication during the first visit's interview, she failed to mention it on subsequent visits without prompting.

The interviews were conducted during a 42-month period. During the study, 567 patients had 776 interviews. Patients who had multiple visits during that time frame were interviewed multiple times. The interviews were conducted following women's visits to their gynecologist. Only nonpregnant women were interviewed.

Among the women who took prescription medications, 20 percent used more than one medication, and 39 percent took more than four medications. Of those interviewed, 97 percent took at least one over-the-counter medication, and 59 percent took more than four OTC medications.

The data also showed several potentially serious drug interactions. The most commonly prescribed medication was antibiotics, some of which are thought to reduce the efficacy of birth control pills.

Researchers also found that nearly 25 percent of patients took medications for anxiety, depression or other mental health issues. Of patients who used oral contraception, 2.3 percent took St. John's wort, which can reduce the efficacy of the birth control pill.

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The study also found several women taking prescription antidepressants also self-medicated with St. John's wort, an herbal supplement commonly used to treat depression, which has been shown to have potentially harmful interactions with prescription antidepressants.

"Will this drug interaction kill you? Probably not," Tracy says. "Can you experience serious adverse effects? Yes."

The study was conducted in conjunction with colleagues in the obstetrics/gynecology clinics at West Virginia University.

The College of Pharmacy, the only school of pharmacy in Minnesota, offers its program on the Twin Cities and Duluth campuses. Founded in 1892, the College of Pharmacy educates pharmacists and scientists and engages in research and practice to improve the health of the people of Minnesota and society. The college is part of the Academic Health Center, which is home to the University of Minnesota's seven health professional schools and colleges as well as several health-related centers and institutes.

*The Academic Health Center is home to the University of Minnesota's seven health professional schools and colleges as well as several health-related centers and institutes. Founded in 1851, the University is one of the oldest and largest land grant institutions in the country. The AHC mission is to prepare the new health professionals who improve the health of communities, discover and deliver new treatments and cures and strengthen the economy.*

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## UNIVERSITY OF MINNESOTA

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420 Delaware Street S.E.  
Minneapolis, MN 55455**NEWS RELEASE****Embargo: 3 p.m. (C.T.) Monday, Feb. 23, 2004****Contact:** Brenda Hudson, Academic Health Center, 612.624.5680Office:  
A395 Mayo Memorial Building  
612-624-5100  
Fax: 612-625-2129**EATING FRUITS AND CEREALS MAY REDUCE RISK OF DYING FROM HEART DISEASE**

MINNEAPOLIS / ST. PAUL (Feb. 20, 2004)—Fiber from fruits and cereals, but not vegetables, may lower the risk of heart disease, according to an article in the February 23 issue of *The Archives of Internal Medicine*, one of the *JAMA/Archives* journals.

“Previous research suggests that dietary fiber, found in fruits, vegetables, grains, and cereals may reduce the risk of heart disease by lowering blood pressure and reducing cholesterol levels,” said lead researcher, Mark Pereira, Ph.D., assistant professor in epidemiology at the University of Minnesota. Although studies suggest that the more fiber a person eats, the lower the risk of heart disease, few studies have looked at the relationship between dietary fiber from different sources and heart disease.

Pereira and colleagues at Harvard University analyzed the pooled data of several studies (from the United States—including two affiliated with the University of Minnesota—and Europe, including 91,058 men and 245,186 women) to determine whether the source of dietary fiber (from fruit, vegetables or grains) had any association with heart disease risk. Each study recorded what kind of foods and how much the participants ate, although there was considerable variation in the level of dietary detail across the studies. All studies had some measurement of dietary fiber.

Among the total participants from the studies, there were 5,249 incident (new) heart disease cases, and 2,011 participants died of heart disease over six to ten years of follow-up.

The researchers found that for every 10 grams of fiber eaten per day, there was a 14 percent decrease in risk for coronary heart disease (CHD) events (i.e., heart attacks) and a 27 percent decreased risk of dying from heart disease. “Associations were stronger for coronary deaths than for all events, with reductions in risk of 25 percent for cereal fiber and 30 percent for fruit fiber for each 10 grams per day eaten,” said Pereira. “In contrast, vegetable fiber was not associated with CHD incidence or mortality [death].”

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*Dietary fiber study, page 2*

“In conclusion, our results suggest that dietary fiber intake during adulthood is inversely associated with CHD risk. Coronary risk was 10 percent to 30 percent lower for each 10 grams per day eaten of total, cereal, or fruit fiber,” said Pereira. “Therefore, the recommendations to consume a diet that includes an abundance of fiber-rich foods to prevent CHD are based on a wealth of consistent scientific evidence.”

(Arch Intern Med. 2004;164:370-376. Available post-embargo at [archinternmed.com](http://archinternmed.com))

Editor's Note: This work was supported by a research grant from the National Heart, Lung, and Blood Institute, National Institutes of Health, Bethesda, Md. The GPS was financed by the FREJA (Female Researchers in Joint Action) program from the Danish Medical Council.

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**What:** Discovering Your Place guidance event  
**When:** 11 a.m.-1 p.m. Wednesday, Feb. 25  
**Where:** Great Hall, Coffman Union, 300 Washington Ave. S.E., Minneapolis  
**Contacts:** Elizabeth Hruska, Career and Community Learning Center, (612) 625-9358  
 Paul Moore, University News Service, (612) 624-0214

### U OF M STUDENTS GET HELP 'DISCOVERING THEIR PLACE'

MINNEAPOLIS / ST. PAUL--University of Minnesota students who aren't sure which way they should take their studies can get an educational road map at "Discovering Your Place," a guidance event for undeclared undergraduates.

From 11 a.m. to 1 p.m. Wednesday, Feb. 25 in the Great Hall of Coffman Union, 300 Washington Ave. S.E., Minneapolis, students can learn about majors and minors offered at the university, international experiences, internships, volunteer opportunities, student organizations and learning/academic skills assistance.

Students will also be able to take a five-minute survey to determine their primary interest areas. The inventories are scored and interpreted by career counselors on site. Once students' interests are assessed, they are referred to corresponding information and resource tables to begin gathering information.

Students who complete an evaluation form of the fair will be registered for a prize drawing at the end of the event.

For more information go to [www.ucs.umn.edu/career/discover.html](http://www.ucs.umn.edu/career/discover.html) □

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## TX RESULT REPORT

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		002	DAILY 74159	FEB.23	09:47	001	00H00'21"	ECM	OK 0000
		003	AP 86123425299	FEB.23	09:48	001	00H00'48"	ECM	OK 0000
		004	WCCO RADIO 83700410	FEB.23	09:49	001	00H00'37"	G3	OK 0000
		005	KARE 87635468606	FEB.23	09:50	001	00H00'33"	ECM	OK 0000
		006	KSTP 86516424409	FEB.23	09:52	001	00H00'20"	ECM	OK 0000

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### U OF M RESEARCHERS A STEP FURTHER IN TYPE 1 DIABETES TREATMENT

*Single infusion of islet cells surpasses previous success*

MPLS/ST. PAUL (Feb. 23, 2004) – Researchers at the University of Minnesota’s Diabetes Institute for Immunology and Transplantation (DIIT) and the University of California San Francisco (UCSF) Diabetes Center have achieved insulin independence in four of six patients with long-term Type 1 diabetes using one infusion of insulin-producing “islet” cells from a single donor pancreas.

Individuals in whom Type 1 diabetes was complicated by hypoglycemic unawareness participated in this trial. The combination of improved islet preparation techniques and optimized recipient immunosuppression contributed to the successful study outcome. Insulin independence has now been maintained for more than one year in four recipients, for more than two years in three recipients, and for more than three years in two recipients. The study, funded primarily by the Juvenile Diabetes Research Foundation, is published in the March issue of the *American Journal of Transplantation*.

“This success builds upon other recent successes in islet transplantation and marks a critical step in developing islet transplants into a vital treatment option for people with Type 1 diabetes”, said Dr. Bernhard Hering, associate professor of surgery, holder of the Eunice L. Dwan Diabetes Research Chair at the University of Minnesota, and principal investigator of the study.

“This trial also brings us a step closer to minimizing the requirements for immunosuppression in islet transplant recipients,” said Dr. Jeffrey Bluestone, professor of medicine and director of the Diabetes Center at UCSF, and co-principal investigator of the study.

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Dr. Bluestone developed the new generation anti-CD3 monoclonal antibody that was administered in this trial during the first two weeks after transplant. This antibody is directed against the subset of white blood cells that cause Type 1 diabetes and mediate rejection of transplants. Study participants received two other immunosuppression drugs.

In a subsequent trial supported by the NIH Immune Tolerance Network ([www.immunetolerance.org](http://www.immunetolerance.org)), the research team at the University of Minnesota and UCSF will test whether maintenance immunosuppressive medication can be minimized or even discontinued in islet transplant recipients given the anti-CD3 antibody.

"The demonstration in this pilot clinical trial that insulin independence can be induced in Type 1 diabetes with single donor islet transplants is quite important because it will allow an increased number of islet transplants to be performed, and at the same time, will decrease the risk and cost of the procedure", Richard Insel, M.D., executive vice president of research at the Juvenile Diabetes Research Foundation.

For the complete study, please visit [www.blackwellpublishing.com](http://www.blackwellpublishing.com), or visit the DIIT's website at [www.diabetesinstitute.org](http://www.diabetesinstitute.org)

*The Diabetes Institute for Immunology and Transplantation (DIIT) was formed in 1994 to capitalize on the University of Minnesota's historic leadership in pancreas and islet cell transplantation. Both of these advanced treatments for diabetes were pioneered here. Under the leadership of David E.R. Sutherland, M.D., Ph.D., both procedures have continued to be refined. The University of Minnesota is the home of the world's oldest, largest pancreas transplant program, having performed over 1,500 pancreas transplants, which are frequently preceded, accompanied or succeeded by a kidney transplant.*

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### **U OF M NURSING RESEARCH EXPLORES SCHOOL VIOLENCE**

*Study examines links between stigma, gender, and risky behaviors*

MPLS/ST. PAUL (Feb. 24, 2004)—Research at the University of Minnesota School of Nursing may help schools become safer environments for adolescents. In a five-year project funded by the National Institutes of Health, Elizabeth Saewyc, R.N., P.H.N., Ph.D., associate professor in the School of Nursing's Center for Adolescent Nursing, will study how some students are stigmatized, are targeted for violence at school, and engage in risky behaviors such as drug use. She will look at health surveys of schools in three countries—the United States, New Zealand, and Canada—to see how cultural differences might play a role in who is targeted, how violence is used, and how the students are at risk. In each country, she will focus on students from three similar ethnic groups—indigenous, Asian, or European heritage.

There is a variety of students who can be targeted by stigma, Saewyc notes: teens with visible disabilities, students who are unusually tall or short or obese, and students with less visible stigma, such as gay, lesbian, and bisexual teens, or youth who have suffered mental health problems or sexual assault. The kinds of violence they endure ranges from constant teasing and insults to assaults with weapons.

“Students forced to bear an unfavorable label feel rejected and discriminated against,” Saewyc says. “We know this affects their physical and psychological health from previous studies that tell us they are more likely to drink, use drugs, feel unsafe, and skip school—and even attempt suicide or some other violent response. We want to find out how schools and students can change this cycle of violence and risky behavior.”

As part of the study, Saewyc plans to bring the research results back to students, asking them to help think of ways to change the patterns in schools.

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The study is funded by a \$650,000 grant from the National Institute of Drug Abuse, an agency of the National Institutes of Health, as part of a group of studies examining the health consequences of stigma. The Center for Adolescent Nursing advances health in the United States and abroad through international scientific cooperation and fosters research partnerships between U.S. scientists and foreign counterparts through grants, fellowships, exchange awards, and international agreements.

**-end-**

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### **COMMON EPILEPSY TREATMENT TO BE USED FOR BULIMIA NERVOSA U of MN doctors receive NIH grant to test promising new bulimia treatment that aims to stop involuntary binge-eating and vomiting**

MINNEAPOLIS / ST. PAUL (February 24, 2004) — The University of Minnesota's Neuroscience Research Group received nearly \$300,000 from the National Institutes of Health to study the effectiveness of a common epilepsy therapy in treating bulimia nervosa. This is the first study of Vagus Nerve Stimulation Therapy (VNS) for this disorder. VNS Therapy aims to reverse the physiological changes that have occurred in the function of the vagus nerve from repeated binge eating and vomiting. By controlling vagus nerve activity through electrical stimulation, doctors hope to reduce the frequency of vomiting in bulimics.

VNS Therapy is expected to dampen activity in the vagus nerve, the main "information highway" from the stomach to the brain. A pacemaker-like pulse generator is implanted directly below the skin of a patient's chest to deliver intermittent pulses of electrical stimulation to the brain via the vagus nerve in the neck. Using an external programming system, doctors can adjust the timing and amount of stimulation the patient receives. This stimulation is expected to control vagus nerve activity and reduce the urges to binge eat and vomit.

"Most people don't realize that women with bulimia only self-induce vomiting at the early stages of the disorder. Later on, this behavior becomes involuntary as a result of changes in the activity level of the vagus nerve" says Patricia Faris, Ph.D., associate professor in the University of Minnesota Medical School's Department of Psychiatry and principal investigator of the VNS Therapy trial. "Bulimia is both a psychological and physiological disorder. The social pressure to be thin is probably the reason for an individual to start binge eating and vomiting, but after a while these behaviors induce changes in the activity of the vagus nerve. The goals of our research are to reverse the physiological changes that have occurred thereby reducing, or eliminating, the urges to vomit and to address the psychological components which originally led to the initiation of the disorder and which, if not re-structured, may result in future relapses."

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*New bulimia treatment, Page 2*

A previous study conducted by the University of Minnesota published in *The Lancet* in March 2000 indicated that voluntary binge eating and vomiting early on in bulimia progressively stimulates the vagus nerve at higher intensities. Eventually, the vagus nerve spontaneously fires at this higher intensity. In this study, Zofran, a drug clinically used to modulate vagal activity, was found to be successful in dramatically reducing bulimic symptoms. VNS will provide enhanced ability to regulate vagus nerve activity, thereby allowing the individual to regain control over her disordered eating.

For more information on participating in this study or other eating disorder studies, call **612.626.4034** or e-mail [eating@umn.edu](mailto:eating@umn.edu)

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*Twin Cities Campus**Office of Communications  
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A395 Mayo Memorial Building**612-624-5100**Fax: 612-625-2129***Contact:** Ashley Burt, Academic Health Center, 612.624.2449  
Jamie Proulx, University News Service, 612.624.8038**U OF M TO STUDY "WALKABILITY" OF TWIN CITIES NEIGHBORHOODS**  
**Researchers will examine link between environmental factors and obesity**

MINNEAPOLIS / ST. PAUL (March 8, 2004) – Researchers from the University of Minnesota College of Architecture and Landscape Architecture (CALA) and School of Public Health (SPH) are collaborating on a first-ever study of how the physical environment of residential Twin Cities neighborhoods affects the level of physical activity among residents..

"Measurement of Walkability in the Twin Cities" is a two-year study funded by a grant from The Robert Wood Johnson Foundation (RWJF) that will measure the association between environmental factors and the amount of walking done in residential neighborhoods. Active Living Research, a national program supported by RWJF, selected the research team as one of nine new grantees that are studying relationships between the built environment and physical activity levels. Study investigators will begin recruiting local residents to participate in the study in March.

"While social and economic characteristics are generally found to be more important predictors of whether people will walk than physical factors, the environment does make a difference," said Ann Forsyth, a principal investigator of the study and CALA professor. "This study will measure how much of a difference and which factors are key."

"This collaboration between the fields of public health and architecture is important in light of the obesity epidemic and recent findings that there may be an association of living in suburbs and obesity," said Kathryn Schmitz, SPH assistant professor, who is serving as an investigator on the project along with SPH assistant professor Michael Oakes.

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*"Walkability" of Twin Cities, Page 2*

The research team has randomly selected 36 sites of 160 acres each — varying greatly by street pattern and population density — in St. Paul and the I-35W corridor, where particularly good Geographic Information System (GIS) data are available. GIS data will allow the researchers to concurrently analyze multiple environmental factors. They will combine this data with census data to measure an area's physical and social characteristics.

The study will involve close collaboration with neighborhood groups and city officials for each of the 36 sites to increase participation of the randomly chosen residents. Selected residents will be equipped with accelerometers, devices that precisely measure movement and physical activity, and will answer surveys about their physical activities and neighborhood perceptions. Participants will wear the accelerometers for seven days and will be paid \$75 for their involvement in the study.

After the fieldwork is completed, the researchers will analyze how much of a difference the environment makes on physical activity, controlling statistically for a large number of factors. The findings will be relevant to the Twin Cities and nationally.

*The Academic Health Center is home to the University of Minnesota's seven health professional schools and colleges, including the School of Public Health, as well as several health-related centers and institutes. Founded in 1851, the University is one of the oldest and largest land grant institutions in the country. The AHC prepares the new health professionals who improve the health of communities, discover and deliver new treatments and cures, and strengthen the health economy.*

*The Design Center for American Urban Landscape investigates how design can be used to make the metropolitan landscape more livable and sustainable. The Design Center was established with a grant from the Dayton Hudson Foundation and is housed within the College of Architecture and Landscape Architecture (CALA) at the University of Minnesota.*

**ABOUT ACTIVE LIVING RESEARCH:**

Active Living Research is a \$12.5-million national program of The Robert Wood Johnson Foundation, created to stimulate and support research that will identify environmental factors and policies that influence physical activity.

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## UNIVERSITY OF MINNESOTA

*Trust Center Campus*  
**NEWS RELEASE**  
 For Immediate Release

Office of Communications  
 Academic Health Center

Mayo Mail Code 735  
 420 Delaware Street S.E.  
 Minneapolis, MN 55435

Office:  
 A395 Mayo Memorial Building  
 612-624-5100  
 Fax: 612-625-2129

Contact: Claudia Kanter, School of Dentistry, 612.625.0402

**UNIVERSITY OF MINNESOTA APPOINTS NEW DEAN**  
**Patrick M. Lloyd to lead School of Dentistry**

MINNEAPOLIS / ST. PAUL (Mar. 12, 2004)—Patrick M. Lloyd, D.D.S., M.S., has been named dean of the University of Minnesota School of Dentistry, effective April 1, 2004. His appointment was approved by the University's Board of Regents today. Lloyd replaces William F. Liljemark, D.D.S., Ph.D. who was named interim dean in June 1, 2003.

"Dr. Lloyd has the vision and leadership skills that will serve the School of Dentistry well," said Frank Cerra, senior vice president for health sciences. "Dr. Lloyd is strongly supported by the faculty and staff of the school. He is an outstanding practitioner and teacher and is dedicated to enhancing the performance of research at the school."

Lloyd is a graduate of Marquette University School of Dentistry and earned his certificate in prosthodontics from the V.A. Medical Center in Milwaukee, Wis., as well as a master of science from the Graduate School of Marquette University. After completing his specialty training, Lloyd served as chief of dental geriatrics and directed a fellowship in geriatric dentistry at the Milwaukee V.A. Medical Center. In 1985 he was appointed to serve as national coordinator for Geriatric Dental Programs for the Department of Veterans Affairs. In 1992, he joined the faculty at Marquette University, where he was head of the Special Patient Care Clinic. He held that position for four years before being named executive officer of the Department of Family Dentistry at the University of Iowa College of Dentistry in 1996.

Lloyd is the current president-elect of the 2,600-member American College of Prosthodontics (ACP), the nation's largest organization of trained prosthodontists, and founding chair of its geriatrics committee. For the past 10 years, he has served as the editor-in-chief of the *Journal of Prosthodontics*, the official journal of the ACP. He is a diplomate of the American Board of Prosthodontics and a fellow of both the American College of Prosthodontists and of the

—more—



*New School of Dentistry Dean, Page 2*

clinical medical section of the Gerontological Society of America. Lloyd is an international lecturer on a variety of issues related to caring for the older adult, publishes articles on treatment strategies for the aged dental patient, and his diverse clinical experience includes private practice in prosthodontics with an emphasis on care of the older adult.

The University of Minnesota School of Dentistry is the state's only dental school, graduating dentists, hygienists, specialists, and researchers committed to discovering new knowledge, technology, and skills to benefit the profession and the community it serves.

*The Academic Health Center is home to the University of Minnesota's seven health professional schools and colleges as well as several health-related centers and institutes. Founded in 1851, the University is one of the oldest and largest land grant institutions in the country. The AHC prepares the new health professionals who improve the health of communities, discover and deliver new treatments and cures, and strengthen the health economy.*

—end—

*"Walkability" of Twin Cities, Page 3*

**ABOUT THE ROBERT WOOD JOHNSON FOUNDATION:**

The Robert Wood Johnson Foundation, based in Princeton, N.J., is the nation's largest philanthropy devoted exclusively to health and health care. It concentrates its grantmaking in four goal areas: to ensure that all Americans have access to quality health care at reasonable cost; to improve the quality of care and support for people with chronic health conditions; to promote healthy communities and lifestyles; and to reduce the personal, social and economic harm caused by substance abuse -- tobacco, alcohol, and illicit drugs.

—end—

## UNIVERSITY OF MINNESOTA

Twin Cities Campus

**NEWS RELEASE****Embargo: March 16, 2004, 15:00 C.T.**Office of Communications  
Academic Health CenterMayo Mail Code 735  
420 Delaware Street S.E.  
Minneapolis, MN 55455Office:  
A305 Mayo Memorial Building  
612-624-5100  
Fax: 612-625-2129**Contact:** Brenda Hudson, Academic Health Center, 612.624.5680**TREATMENT OF DUCTAL CARCINOMA IN SITU  
VARIES WIDELY IN UNITED STATES**

MINNEAPOLIS / ST. PAUL (Mar. 16, 2004)—A new study from the University of Minnesota has found that treatment of ductal carcinoma *in situ* (DCIS), a group of abnormal cells confined to the breast ducts, varies widely in the United States. Treatment ranges from potential overtreatment with aggressive surgical therapy to possible undertreatment by not providing radiation therapy after breast-conserving surgery, according to the study, which is published in the March 17 issue of the *Journal of the National Cancer Institute*.

The incidence of DCIS has increased dramatically in the last few decades, largely because of increased rates of screening mammography. In some cases, DCIS can progress to invasive cancer, but little is known about the characteristics that determine whether or not DCIS will progress to cancer.

To examine current patterns of care of DCIS, Nancy Baxter, M.D., Ph.D., assistant professor at the University of Minnesota's Medical School, and colleagues examined data from the Surveillance, Epidemiology, and End Results program for 25,206 women diagnosed with DCIS from 1992 to 1999. They found that the number of cases of DCIS increased 73 percent during the study period. Overall, 97.5 percent of patients had some type of surgery. The proportion of patients who had a mastectomy declined from 43 percent to 28 percent during the study period.

Overall, 64 percent of women with DCIS had breast-conserving surgery. In 1992, 45 percent of the patients who had breast-conserving surgery received radiation therapy, compared with 54 percent in 1999. The use of axillary dissection overall—the removal of the lymph nodes in the armpit to test for possible spread of disease—declined from 34 percent in 1992 to 15 percent in 1999. Among women who had a mastectomy over the entire study period, 42 percent also had axillary dissection, even though this procedure was not routinely recommended during

—more—



*Ductal Carcinoma In Situ, page 2*

the study period. Both radiation therapy and axillary dissection were more common among women whose DCIS had more aggressive characteristics.

"According to our study, many patients apparently underwent aggressive surgical treatment for DCIS," said Baxter. "Yet other patients appear to have been undertreated, with no radiation therapy after lumpectomy for almost half of them, even in many patients with adverse risk factors. ... We believe that heightened awareness and establishment of standard treatment recommendations could improve DCIS treatment."

In an editorial, Monica Morrow, M.D., of Northwestern University's Lynn Sage Breast Center in Chicago, discusses some of the characteristics of DCIS that make it difficult to treat, such as the often large size and the wide variation in recurrence rates. "The ability to predict which women with DCIS will develop invasive cancer will ultimately solve the dilemma of DCIS," Morrow writes. "For the present, understanding who makes treatment decisions and why is likely to do more to improve the care of women with DCIS than any treatment guidelines."

**Citations:**

- Article: Baxter NN, Vignig BA, Durham SB, Tuttle TM. Trends in the treatment of ductal carcinoma in situ of the breast. *J Natl Cancer Inst* 2004;96:443-8.
- Editorial: Morrow M. The certainties and the uncertainties of ductal carcinoma in situ. *J Natl Cancer Inst* 2004;96:424-5.

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—end—

*Twin Cities Campus*

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Academic Health Center*

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Minneapolis, MN 55455*

*Office:  
A395 Mayo Memorial Building  
612-624-5100  
Fax: 612-625-2129*

## **MEDIA ADVISORY**

**For immediate release**

**What:** Match Day for fourth-year medical students  
**When:** Thursday, March 18, 2004, gathering at 10:30 a.m.  
**Where:** University of Minnesota, McNamara Alumni Center, 200 Oak St. S.E.,  
Minneapolis  
**Contact:** Molly Portz, Academic Health Center, 612.625.2640

### **FOURTH-YEAR MEDICAL STUDENTS NATION-WIDE LEARN RESIDENCY PLACEMENT**

MINNEAPOLIS / ST. PAUL (March 17, 2004) — At 11 a.m. tomorrow, more than 200 fourth-year medical students at the University of Minnesota will learn for the first time which residency program they will enter and where they will begin the final phase of their medical education. The event, known as “Match Day,” takes place simultaneously at all the medical schools around the country and is considered a rite of passage.

“It’s an exciting day for these students, to finally learn where their residencies will take them after working so hard for the past four years,” said Greg Vercellotti, M.D., senior associate dean for education. “We’re confident their education at the University will serve them well in this next stage of their medical careers.”

Students are matched through the National Resident Matching Program (NRMP). The NRMP matches applicants’ preferences for residency positions with program directors’ preferences for applicants. Each year approximately 31,000 students compete for approximately 23,000 residency positions.

***\*Students and faculty will be available for interviews.***

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— end —



# UNIVERSITY OF MINNESOTA

*Twin Cities Campus*

*Office of Communications  
Academic Health Center*

*Mayo Mail Code 735  
420 Delaware Street S.E.  
Minneapolis, MN 55455*

## **Media Alert**

**For immediate release**

*Office:  
A395 Mayo Memorial Building  
612-624-5100  
Fax: 612-625-2129*

**Contact:** Molly Portz, Academic Health Center, 612.625.2640

### **FOURTH-YEAR MEDICAL STUDENTS NATION-WIDE LEARN RESIDENCY PLACEMENT**

- What You'll See:** Two hundred fourth-year University of Minnesota medical students will receive envelopes telling them for the first time which residency program they will enter and where they will begin their final phase of medical education. This is an emotional moment shared with friends, family, and teachers.
- When:** THURSDAY, March 18, 11 a.m.
- Where:** McNamara Alumni Center, University of Minnesota  
200 Oak St. S.E.  
Minneapolis
- Who:** **Fourth-year medical students from the University of Minnesota**  
**Deborah Powell, M.D.**, dean of the University of Minnesota Medical School  
**Greg Vercellotti, M.D.**, senior associate dean for education, University of Minnesota Medical School
- What:** The event, known as Match Day, takes place simultaneously with all the medical schools around the country and is considered a rite of passage. "It's an exciting day for these students, to finally learn where their residencies will take them after working so hard for the past four years," said Greg Vercellotti, M.D., senior associate dean for education. "We're confident their education at the University will serve them well in this next stage of their medical careers."
- Students are matched through the National Resident Matching Program (NRMP). The NRMP matches applicants' preferences for residency positions with program directors' preferences for applicants. Each year, approximately 31,000 students compete for approximately 23,000 residency positions.

—end—



*Twin Cities Campus*

*Office of Communications  
Academic Health Center*

*Mayo Mail Code 735  
420 Delaware Street S.E.  
Minneapolis, MN 55455*

## **MEDIA ADVISORY**

For Immediate Release

*Office:  
A395 Mayo Memorial Building  
612-624-5100  
Fax: 612-625-2129*

Contact: Ruth Rasmussen, College of Continuing Education, 612.625.4781  
Molly Portz, Academic Health Center, 612.625.2640

## **U OF M SCHOOL OF PUBLIC HEALTH OFFERS TRAINING FOR RURAL HEALTH CARE WORKERS**

*Session focuses on health and safety issues unique to farm families*

- What:** Continuing education session focused on issues concerning farm family health. Participants will earn continuing education credit and learn health risks unique to agricultural settings, including:
- Strategies to minimize exposure to animal pathogens and toxic materials in the ecosystem
  - Safety considerations for older adult farm workers
  - Resources available to prevent injuries and illness among farm families and older farm workers
- Who:** Health care professionals in rural communities concerned about farm family health – nurses, physicians, health educators, social workers in clinic, hospital and public health settings
- When:** Tuesday, March 23, 2004  
1 p.m. – 4 p.m.
- Where:** Holiday Inn Rochester South  
1630 South Broadway
- Register:** Call (612) 626-4515 or online at [www.cpheo.umn.edu](http://www.cpheo.umn.edu)
- Cost:** \$25 (This also includes the fee for the second session, beginning at 5:30 p.m.)
- Sponsor:** University of Minnesota School of Public Health, Midwest Center for Occupational Health and Safety

-end-



# UNIVERSITY OF MINNESOTA

Twin Cities Campus

Office of Communications  
Academic Health Center

Mayo Mail Code 735  
420 Delaware Street S.E.  
Minneapolis, MN 55455

Office:  
A395 Mayo Memorial Building  
612-624-5100  
Fax: 612-625-2129

## **MEDIA ADVISORY** For Immediate Release

Contact: Ruth Rasmussen, College of Continuing Education, 612.625.4781  
Molly Portz, Academic Health Center, 612.625.2640

### **U OF M SCHOOL OF PUBLIC HEALTH OFFERS AGRICULTURAL EMERGENCY RESPONSE TRAINING**

*Session focuses on first-responders in emergency settings*

- What:** Training on emergency responses unique to the agricultural setting. Participants will earn continuing education credit and learn:
- Risks unique to agricultural settings
  - Appropriate responses and approaches for machinery-related accidents
  - Resources available for information
- Who:** First-responders to agricultural emergencies - emergency medical technicians, paramedics, firefighters, police officers, volunteers, and hospital emergency workers
- When:** Tuesday, March 23, 2004  
5:30 p.m. – 7 p.m.
- Where:** Holiday Inn Rochester South  
1630 South Broadway
- Register:** Call (612) 626-4515 or online at [www.cpheo.umn.edu](http://www.cpheo.umn.edu)
- Cost:** \$10
- Sponsor:** University of Minnesota School of Public Health, Midwest Center for Occupational Health and Safety

-end-



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## **NEWS RELEASE**

For Immediate Release

Contact: Mary Pattock, School of Nursing, 612.624.0939  
Molly Portz, Academic Health Center, 612.625.2640

### **U OF M NURSE-RESEACHER WINS FEDERAL GRANT *Study to prevent hearing loss among Latino construction workers***

Minneapolis/St. Paul (April 6, 2004)—Madeleine Kerr, Ph.D., R.N., a researcher at the University of Minnesota School of Nursing, has received nearly \$200,000 a year for each of three years in grants from the National Institute on Deafness and Other Communications Disorders (NIDCD), a part of the National Institutes of Health.

Kerr will use the funds to develop and evaluate a hearing loss prevention program tailored to Latino construction workers. It is estimated that, when exposed to typical construction noise, one in four Latino construction workers will experience job-related hearing loss.

With more than 30 million U.S. workers exposed to hazardous noise, hearing loss is the most common occupational disease in the country., according to Kerr. “We’ve focused on construction workers because their environments are often quite damaging,” she said. “For example, one study shows that the average 25-year-old carpenter has the hearing of a 55-year-old.”

Kerr has conducted similar research to benefit English-speaking construction workers. The new project focuses on Latino workers because Latinos now comprise 17 percent of the U.S. construction workforce. “We are going to translate our work not only into the Spanish language,” Kerr says, “but into the Hispanic culture.”

Kerr says the federal government, by investing in this kind of nursing research, “can actually stop hearing loss before it starts – and stop as well the on-the-job danger, human suffering, disability, and costs to families and businesses that accompany it.”

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# UNIVERSITY OF MINNESOTA

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*Office of Communications  
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*Mayo Mail Code 735  
420 Delaware Street S.E.  
Minneapolis, MN 55455*

## **MEDIA ADVISORY**

**Contact:** Brenda Hudson, Academic Health Center, 612.624.5680

*Office:  
A395 Mayo Memorial Building  
612-624-5100  
Fax: 612-625-2129*

### **PUBLIC FORUM ON STEM CELL RESEARCH TO BE HELD AT U OF M**

MINNEAPOLIS / ST. PAUL (April 6, 2004)—The University of Minnesota's Academic Health Center will hold a public forum on April 13 discussing the science behind and the policy implications of conducting human embryonic stem cell research. Late last year, the University—already a leader in adult stem cell research—announced its plan to expand its human embryo stem cell research beyond the federally approved stem cell lines. To do so, the University will seek private funding to support this legal research.

Catherine Verfaillie, director of the University's Stem Cell Institute, will provide a scientific presentation, followed by a point/counterpoint discussion with Jeff Kahn, director of the University's Center for Bioethics, and Steven Calvin, assistant professor in the Medical School and co-chair of the Program in Human Rights in Medicine at the University. Frank Cerra, senior vice president for health sciences, will moderate.

- WHAT:** Public forum on stem cell research
- WHEN:** TUESDAY, April 13, 2004, 6:30 p.m.
- WHERE:** Coffman Memorial Union Theater, University of Minnesota  
300 Washington Ave. S.E., Minneapolis  
Ramp parking is available on East River Road.

The event is free and open to the public.

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# UNIVERSITY OF MINNESOTA

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Minneapolis, MN 55455-0374*

## NEWS RELEASE

**For immediate release**

**Contact:** Brenda Hudson, Academic Health Center, 612.624.5680

### ACCREDITATION AWARD EXTENDED TO U OF M'S HUMAN RESEARCH PROGRAMS

MINNEAPOLIS / ST. PAUL (April 27, 2004) — The Association for the Accreditation of Human Research Protection Programs (AAHRPP) announced today that it has awarded accreditation to the University of Minnesota. AAHRPP is a nonprofit organization that offers accreditation to institutions engaged in research involving human participants. The University of Minnesota is only one of nine institutions worldwide to receive this distinction.

“We are very pleased to confer this status to the University of Minnesota,” said AAHRPP Executive Director Marjorie Speers, Ph.D. “Universities are an important resource for research and innovation, and the University of Minnesota can take pride in being among the first to achieve AAHRPP accreditation.”

“The University of Minnesota makes protection of research participants a top priority, as evidenced by AAHRPP's recognition of our high-quality human research protection program,” said Moira, Keane, director, Research Subjects' Protection Programs at the University of Minnesota. “In pursuing AAHRPP accreditation, the University of Minnesota research community challenged ourselves, through a rigorous process of self assessment, to demonstrate that we meet and exceed regulatory and ethical standards for protecting human subjects in research.”

AAHRPP accreditation is valid for three years. Accredited organizations submit annual reports to AAHRPP on the status of their human research protection programs.

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—end—

# UNIVERSITY OF MINNESOTA

## NEWS RELEASE

### For Immediate Release

Contact: Molly Portz, Academic Health Center, 612.625.2640  
Amy Phenix, University Relations, 612.625.8510

#### **U OF MN TO LEAD NATIONAL EFFORT IN FOOD BIO-SECURITY *Department of Homeland Security Awards University-based Grants***

(MINNEAPOLIS/ST. PAUL) April 27, 2004 – The University of Minnesota has been named one of three U.S. Department of Homeland Security Centers of Excellence and has received a \$15 million, three-year grant from the U.S. Department of Homeland Security to help develop ways to protect the nation's food supply from deliberate contamination or terrorist attack.

The university's Center of Excellence, known as the University Center for Post-Harvest Food Protection and Defense (PHFPD) is a national consortium of academic, private sector, and government partners including three other universities (Michigan State University, North Dakota State University, and University of Wisconsin–Madison), experts at 12 more universities, independent research facilities, state health and agriculture agencies, professional organizations, and agriculture and food industry companies, and private sector consultants. More than 90 investigators make up the consortium.

"The breadth and depth of food security knowledge we were able to pull together for this effort is unparalleled," says Frank Busta, University of Minnesota's Department of Food Science and Nutrition and principal investigator on the grant.

"The University of Minnesota, with extraordinary strength and expertise in the health, animal and food sciences, is uniquely positioned to develop interdisciplinary collaborations," said President Robert Bruininks. "We're proud to lead this important effort and look forward to working with our partners in academia, public health, industry and government to make our nation's food supply safer."

"This University of Minnesota team includes some of the brightest, most accomplished people in food production and health safety. Their recognition as a Homeland Security Center of Excellence is well deserved. I know they will make fine contributions to the protection of our national food supply," said Congressman Martin Sabo. Congressman Sabo is the ranking Democrat on the House Homeland Security Appropriations Subcommittee, which allocates funding for and conducts oversight of the U.S. Department of Homeland Security.

## Research Goals

The U.S. food system—from farms to processing and distribution to retail food service—presents an array of vulnerable targets for terrorist attack. Intentional contamination of agricultural or food products with biological, chemical, or radiological agents could lead to potentially devastating effects on human health, as well as major economic losses to a critical sector of the economy. Historically, efforts to protect the food supply have focused primarily on preventing and reducing accidental contamination by naturally occurring agents.

“The need to protect against potential deliberate contamination now creates a demand for enhanced capabilities to anticipate, prevent, respond quickly to, and minimize the impact of such attacks,” said Michael T. Osterholm, co-principal investigator and director of the University’s Center for Infectious Disease Research and Policy. “This places great importance on federal, state, and local governments and the private sector to coordinate and integrate their biosecurity activities.”

One of the major strengths of the proposal lies in a unique farm-to-table private sector industry group that has been collaborating with the University for nearly two years to identify security gaps in the nation’s food supply and to develop comprehensive plans to respond to those gaps.

“The University of Minnesota is ideally suited to provide a coordinated effort between academia, government, and the key food and agricultural industry players – including producers, processors, wholesalers, and retailers,” said Joel Johnson, C.E.O., Hormel Foods, Austin, Minn. “By working together with industry, as we have in the past on other initiatives, the University will provide excellent leadership in the nation on this counter-terrorism effort.”

The grant was announced at a press conference today at the Department of Homeland Security’s Science and Technology Offices with DHS Secretary Tom Ridge and Secretary of Agriculture Ann Veneman. Naming the university a national center of excellence is an initiative of DHS’s Office of University Programs. For more information on the grant process, [www.dhs.gov](http://www.dhs.gov).

-end-

## UNIVERSITY OF MINNESOTA

Twin Cities Campus

**NEWS RELEASE****Embargo: May 18, 2004, 3 p.m., C.D.T.****Contact: Brenda Hudson, Academic Health Center, 612.624.5680**Office of Communications  
Academic Health CenterMayo Mail Code 735  
420 Delaware Street S.E.  
Minneapolis, MN 55455Office:  
A395 Mayo Memorial Building  
612-624-5100  
Fax: 612-625-2129**DIRECT MAILING OF BLOOD TEST KITS INCREASES  
COLORECTAL CANCER SCREENING**

MINNEAPOLIS / ST. PAUL (May 17, 2004)—Direct mailing of fecal occult blood test (FOBT) kits combined with follow-up reminders increases adherence to colorectal cancer screening guidelines, according to a new study by University of Minnesota researchers and published in the May 19 issue of the *Journal of the National Cancer Institute*.

About 148,000 Americans are diagnosed with colorectal cancer each year and 56,600 die from the disease. Several studies have shown that screening reduces deaths from colorectal cancer. National guidelines recommend one of four screening methods for colorectal cancer for people aged 50 and older: an annual FOBT, a flexible sigmoidoscopy every five years, a colonoscopy every ten years, or a double-contrast barium enema x-ray every five years.

Half of the U.S. population, however, does not take advantage of colorectal cancer screening. To investigate ways to increase the rate of colorectal cancer screening, Timothy R. Church, Ph.D., assistant professor, School of Public Health, and Cancer Center member, along with Mark Yeazel, M.D., and colleagues at the University of Minnesota conducted a randomized trial of 1,451 people age 50 and over from Wright County, Minn, with support from the Allina Health Systems Foundation, Wright County Foundation, Minnesota Medical Foundation and Robert Wood Johnson Foundation. Participants were placed into three groups: the control group received only a questionnaire that asked about their use of colorectal cancer screening tests; a second group received a questionnaire followed by an FOBT kit; and the third group received a questionnaire followed by an FOBT kit and additional reminders to complete the test. One year later, the researchers sent participants a follow-up questionnaire again asking about their screening use. The trial took place within the context of a county-wide campaign to educate the community about colorectal cancer screening.

In the first questionnaire, 21.5 percent of the people reported that they followed the guidelines for fecal occult blood testing and 55.8 percent reported that they followed at least one

—more—



*Colorectal cancer screening, page 2*

of the national guidelines for colorectal cancer screening. After a year had passed, the percentage of people who reported following the FOBT guidelines increased, in absolute percentage points, by 1.5 percent in the control group, 16.9 percent among those who received FOBT kits, and 23.2 percent among those who received kits with reminders. The percentage who reported that they followed any of the screening guidelines increased by 7.8 percent in the control group, 13.2 percent among those who received kits, and 14.1 percent among those who received kits and reminders.

These results "suggest that direct mailing of FOBT kits can be used to effect a change in the screening behavior of a large number of people who could benefit from regular colorectal cancer screening," the authors write.

Citation:

- Church TR, Yeazel MW, Jones RM, Kochevar LK, Watt GD, Mongin SJ, et al. A Randomized Trial of Direct Mailing of Fecal Occult Blood Tests to Increase Colorectal Cancer Screening. *J Natl Cancer Inst* 2004; 96:770-80.

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—end—

## UNIVERSITY OF MINNESOTA

Twin Cities Campus

Office of Communications  
Academic Health CenterMayo Mail Code 735  
420 Delaware Street S.E.  
Minneapolis, MN 55455**NEWS RELEASE**

For immediate release

Office:  
A395 Mayo Memorial Building  
612-624-5100  
Fax: 612-625-2129**Contact:** Brenda Hudson, Academic Health Center, 612.624.5680**U OF M ESTABLISHES NATION'S FIRST ENDOWED  
CHAIR IN SEXUAL HEALTH**

MINNEAPOLIS / ST. PAUL (May 24, 2004) — The University of Minnesota announces the nation's first endowed chair in sexual health. The chair is part of an ongoing initiative within the University's Program in Human Sexuality to provide research, education, and patient care in this field of public health. More than 260 donors have pledged a total of more than \$1 million toward the endowed chair.

Former U. S. Surgeon General David Satcher today applauded the University's commitment at a national conference on sexual health. "The University of Minnesota's endowed chair in sexual health offers an important contribution in the field of public health. By providing science-based research, I believe we can work toward promoting sexual health and responsible sexual behavior." The conference, *The Call to Action on Sexual Health: Science and Belief - Seeking Common Ground*, is being held today at the Omni Shoreham Hotel in Washington, D.C. In 2001, Satcher released *The Surgeon General's Call to Action to Promote Sexual Health and Responsible Sexual Behavior*.

Also participating in today's conference is Eli Coleman, Ph.D., director of the University's Program in Human Sexuality in the Medical School's department of family practice and community health. Coleman describes the program, home to the new chair, as one of the oldest, largest, and well-recognized human sexuality centers in the country. "The Program in Human Sexuality at the University of Minnesota has been on the cutting edge of research, education, and patient care for 35 years. While Minnesotans have a tradition of modesty, we also have a tradition of strong public health informed by science and guided by principles of equity and social justice."

—more—



*Chair in sexual health, page 2*

One of the chair's donors, Michael Ross, Ph.D., M.P.H., M.H.P.Ed., professor of public health at the University of Texas, believes the endowed chair will inspire other universities to follow suit. "The field of sexuality has become a mainstream one in psychosocial and medical research and this endowed chair, in one of the most prestigious programs in human sexuality in the world, sets the arena and the standards for other universities to follow."

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*Founded in 1939, the Minnesota Medical Foundation raises \$55 million annually for health-related education and research at the University of Minnesota. Through Campaign Minnesota, which concluded on June 30, 2003, the Foundation raised more than \$516 million, exceeding its \$500 million goal. For more information about the Foundation, visit [www.umn.mmf.edu](http://www.umn.mmf.edu).*

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## UNIVERSITY OF MINNESOTA

Twin Cities Campus

Office of Communications  
Academic Health CenterMayo Mail Code 735  
420 Delaware Street S.E.  
Minneapolis, MN 55455**NEWS RELEASE****EMBARGO: 1 June 2004, 3 p.m. CDT**Office:  
A395 Mayo Memorial Building  
612-624-5100  
Fax: 612-625-2129**Contact:** Brenda Hudson, Academic Health Center, 612.624.5680**"REDUCED EXPOSURE" TOBACCO PRODUCTS LESSEN CARCINOGEN EXPOSURE, BUT MEDICINAL NICOTINE BETTER**

MINNEAPOLIS / ST. PAUL (May 28, 2004) —Smokers and other tobacco users who switch to "reduced exposure" tobacco products lessen their exposure to tobacco-associated carcinogens, and those who switch to medicinal nicotine get an even greater reduction, according to a new study by University of Minnesota researchers. The study will appear in the June 2 issue of the *Journal of the National Cancer Institute*.

Tobacco users who cannot or will not quit but would like to limit their exposure to carcinogens may instead switch to tobacco products advertised as having less of these harmful chemicals. Although some tobacco companies have developed methods to reduce the formation of nitrosamines—the most abundant and potent tobacco carcinogens, which are created during the curing, fermentation, and aging of tobacco leaves— it is not known if, compared to medicinal nicotine, these products are safer or how much they reduce carcinogen exposure in people.

To evaluate the benefits of switching to these products, Dorothy K. Hatsukami, Ph.D., of the University of Minnesota Transdisciplinary Tobacco Use Research Center and Cancer Center member, and colleagues measured carcinogen uptake in 54 users of smokeless tobacco and 51 cigarette smokers who switched to either a "reduced exposure" tobacco product (Swedish snus for the smokeless tobacco users and OMNI cigarettes for the smokers) or medicinal nicotine (nicotine patch). The researchers measured levels of tobacco specific nitrosamines in the urine of all participants weekly for two weeks before and four weeks after the switch. Smokers were also assessed for levels of a biomarker for polycyclic aromatic hydrocarbon uptake.

Each of the four groups of subjects had reduced levels of nitrosamines during the four weeks after the switch, although subjects in the medicinal nicotine groups had greater reductions. In addition, among the cigarette smokers, only those who switched to medicinal nicotine experienced a reduction in levels of the biomarker for polycyclic aromatic hydrocarbon uptake.

—more—



*Reduced exposure tobacco products, page 2*

The researchers also note that carcinogen exposure in users of the OMNI cigarette did not decrease as much as was advertised on the company's Web site, which cited machine determined exposure of these carcinogens.

"Because the safety profile for medicinal nicotine is better than that for conventional or modified tobacco products, the use of long-term medicinal nicotine products is more likely to result in reduced disease risk," said Hatsukami. In addition, the authors stressed the need for Food and Drug Administration regulation of tobacco products so that standards can be established for allowable toxin levels. This would allow the public to "be accurately informed about the extent to which they are exposed to tobacco toxins with the use of these products," Hatsukami added.

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## NEWS RELEASE

For Immediate Release: Tuesday, June 1, 2004

*Office:  
A395 Mayo Memorial Building  
612-624-5100  
Fax: 612-625-2129*

Contact: Brenda Hudson, University of Minnesota, 612.624.5680  
Ryan Kuresman, Genetics Policy Institute, 202-293-5870

### U OF M PROFESSOR TO ADDRESS UNITED NATIONS DELEGATES ON THERAPEUTIC CLONING AND STEM CELL RESEARCH

MINNEAPOLIS, MINN. (June 1, 2004)—University of Minnesota Professor of Pediatrics, John E. Wagner, M.D., will address delegates of the United Nations at a conference held tomorrow, June 2, 2004, at the United Nations Headquarters in New York City. The conference is being hosted by the Genetics Policy Institute. The purpose of the conference is to discuss the repercussion of an international ban on therapeutic cloning. As one of two clinicians involved in the conference, Wagner, who is also the scientific director of clinical research at the University's Stem Cell Institute, will be on a panel that addresses treatment, cures, and the promise of stem cell research for patients.

United Nations delegates to the conference, Human Cloning Issues in All Its Aspects for the United Nations, will hear from leading scientists in the field of somatic-cell nuclear transfer, in-vitro fertilization, experimental biology, and regenerative medicine. A list of the 11 panelists and their biographies can be accessed via the Genetics Policy Institute Web site ([www.genpol.org](http://www.genpol.org)). **A press conference will be held today at 2:00 p.m. E.D.T. at the United Nations Press Briefing Room.**

Last year, GPI led a grassroots effort to defend therapeutic cloning research in the United Nations, which was considering a ban on all forms of cloning research, including therapeutic cloning. After contentious debate, the United Nations deferred a decision on the issue until October 2004.

"It is important for people around the world to better understand the promise and potential of stem cell research," said Wagner. "Research at the University of Minnesota is already making a difference in the lives of patients, and together with Dr. Catherine Verfaillie, we expect that human clinical trials are probable in the next two years."

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*U of M professor to address U.N., page 2*

Wagner holds two endowed chairs at the University of Minnesota—the Variety Children's Association Chair in Molecular and Cellular Therapy and the Albert D. and Eva J. Cornica Chair.

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Fax: 612-625-2129*

## NEWS RELEASE

For immediate release

**Contact:** Brenda Hudson, Academic Health Center, 612.624.5680

### **TOXIC SHOCK SYNDROME ON THE RISE** *Recent numbers are approaching early 1980s epidemic*

MINNEAPOLIS/ST. PAUL (June 8, 2004)—Researchers at the University of Minnesota have documented a consistent rise in the incidence of toxic shock syndrome (TSS). The TSS surveillance program targeted both women (menstrual) and others (nonmenstrual) in the Twin Cities metro area, population 3 million, from 2000 to 2004. The results, published in this month's *Journal of Clinical Microbiology*, are consistent with the Centers for Disease Control's findings of an 18 percent increase over the same period.

TSS is an acute-onset illness caused by *Staphylococcus aureus* bacteria.

Symptoms include fever, sunburn-like rash, and flu-like symptoms, including vomiting, diarrhea, and generalized aches and pains. TSS is associated with tampon use, usually high absorbency tampons. The incidence of TSS dropped in 1984, when the highest absorbency tampons were removed from the market, and women were educated to use lower absorbency tampons.

In the early 1980s, the yearly incidence of TSS was 10 per 100,000 women of menstrual age. By the late 1980s, the incidence dropped to 1 per 100,000 women. The numbers have been on the rise with 1.6 per 100,000 in 2001; 2.4 per 100,000 in 2002; 3.4 per 100,000 in 2003; and 5 per 100,000 to date in 2004.

"If the current rate continues to increase, by end of the year the incidence of toxic shock syndrome will be approximately where it was at its peak in 1980-81," said Patrick Schlievert, Ph.D., professor of microbiology in the University's Medical School and principal investigator on the study, which has national significance. "Although this study was done in the Twin Cities, this is a phenomenon across the United States," he said.

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*Toxic Shock Syndrome, page 2*

The reason for the increase is unclear, said Schlievert, but doctors and women need to be aware that TSS is on the rise and should monitor tampon use. Another potential concern is the increased resistance to antibiotics used to treat TSS.

This study was funded by a U.S. Public Health Service grant from the National Heart, Lung and Blood Institute.

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Minneapolis, MN 55455**NEWS RELEASE**  
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A395 Mayo Memorial Building  
612-624-5100  
Fax: 612-625-2129Contact: Ashley Burt, Academic Health Center, 612.624.2449  
Brenda Hudson, Academic Health Center, 612.624.5680**WOMEN WITH PKU CAN HAVE HEALTHY CHILDREN**  
*U of M study confirms*

MINNEAPOLIS/ST. PAUL (June 4, 2004) – A study conducted by researchers at the University of Minnesota offers hope for women with phenylketonuria (PKU) who want to have children. With the help of surrogate mothers, women with PKU and their partners can have babies without the complications that would typically result from the woman's metabolic abnormalities. The results of the study are available online or in the June 3 issue of *Molecular Genetics and Metabolism*.

PKU is a genetic disease that prevents protein from being properly metabolized in the body, causing mental retardation and neurological disorders. There is no cure; the disease can only be managed by a strict diet. Women with PKU who become pregnant, even if they adhere to a strict diet, experience a high incidence of spontaneous abortion and severe complications for the fetus, such as mental retardation and congenital malformations. The baby does not, however, have PKU.

"The fact that babies from mothers with PKU don't have the disease tells us that the issues are in carrying the baby, not in the genetic makeup of the mother. This is great news for women with PKU who want to have families," said Robert Fisch, M.D. principal investigator and former professor of medicine at the University. "We've cleared a giant hurdle in helping women with PKU not let their disease limit their reproductive options."

In certain cases, when mothers follow a strict diet before and during pregnancy, the fetus can be born healthy. But, the incidences aren't consistent and doctors aren't certain which factors influence a healthy normal pregnancy for a woman with PKU.

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A395 Mayo Memorial Building  
612-624-5100  
Fax: 612-625-2129**Contact:** Brenda Hudson, Academic Health Center, 612.624.5680  
Andrea Martin, Clinical Coordinator, 612.625.7931**U of M Study Explores Risk Factors for Type 1 Diabetes***Future research will try to prevent diabetes*

MINNEAPOLIS/ST. PAUL (June 8, 2004) – University of Minnesota researchers today launched a study that will probe the risk factors and biological events leading to type 1 diabetes, a disease in which the body's immune system mistakenly destroys the insulin-producing beta cells of the pancreas. The hormone insulin is needed to convert glucose into energy.

"In the last 10 years, we've made great strides in predicting who is at greatest risk for type 1 diabetes by studying the genetic and immune markers for this disease," said David M. Brown, M.D, professor of pediatrics and principal investigator. "In this study, we hope to deepen our understanding of why the immune system targets and destroys the beta cells. With this knowledge, we hope to develop ways to safely prevent type 1 diabetes and to preserve the beta cells of people who've recently been diagnosed with the disease."

Type 1 diabetes, formerly known as juvenile onset diabetes, develops when the body's immune system mistakenly destroys the insulin-producing beta cells of the pancreas. The hormone insulin is needed to convert glucose into energy. People with this form of diabetes need several insulin injections a day or an insulin pump to survive. However, insulin replacement is not a cure, and most people with type 1 diabetes eventually develop one or more complications of diabetes, including damage to the eyes, nerves, kidneys, and blood vessels. Type 1 diabetes accounts for 5 to 10 percent of all diagnosed cases of diabetes.

"We hope to screen first-degree relatives ages 1 to 45 and second-degree relatives ages 1 to 20 of people with type 1 diabetes," said Brown.

—more—



*Type 1 diabetes study, page 2*

Screening involves a simple blood test for autoantibodies that appear in at-risk people years before diabetes develops. After enrolling in the study, participants will be closely monitored for signs of diabetes and may be offered the opportunity to participate in studies that try to stop the disease process.

The University of Minnesota is one of 18 medical centers in the U.S., Canada, Europe, and Australia participating in Type 1 Diabetes TrialNet. This network of researchers, labs, and facilities is dedicated to understanding the autoimmune process that leads to type 1 diabetes, preventing the disease, and stopping its progression in those newly diagnosed.

At diagnosis, most people with type 1 diabetes still have some of their beta cells. In time, however, the immune system destroys more of these cells, making it harder to control blood glucose. The University of Minnesota is participating in a study of individuals who have had diabetes for less than 60 days to see if the destruction of beta cells can be stopped or delayed.

About 18.2 million people--6.3 percent of the U.S. population--have diabetes. It is the main cause of kidney failure, limb amputations, and new onset blindness in adults and is a major cause of heart disease and stroke. Type 2 diabetes, which accounts for up to 95 percent of all diabetes cases, is associated with older age, obesity, family history of diabetes, history of gestational diabetes, impaired glucose metabolism, physical inactivity, and race/ethnicity. African Americans, Hispanic/Latino Americans, American Indians, and some Asian Americans and Native Hawaiians or other Pacific Islanders are at particularly high risk for this form of diabetes.

Type 1 Diabetes TrialNet is funded by the National Institutes of Health, part of the U.S. Department of Health and Human Services. The Juvenile Diabetes Research Foundation International and the American Diabetes Association also support this research.

For more information, see [www.DiabetesTrialnet.org](http://www.DiabetesTrialnet.org) or call (800) 688-5252 ext 57931.

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Office of Communications  
Academic Health CenterMayo Mail Code 735  
420 Delaware Street S.E.  
Minneapolis, MN 55455**NEWS RELEASE****Embargo: June 14, 2004, 11 a.m., C.D.T.****Contact: Brenda Hudson, Academic Health Center, (612) 624-5680**Office:  
A395 Mayo Memorial Building  
612-624-5100  
Fax: 612-625-2129**NEW TARGET FOR BREAST CANCER THERAPY DISCOVERED**

MINNEAPOLIS / ST. PAUL (June 11, 2004) — University of Minnesota researchers have identified a new molecular target that when inhibited blocks cancerous tumor growth in the breast. Although molecular targets for cancers have been identified in the past, this one appears to be a “major hub” for tumor growth activity. The research is published in the journal *Cancer Cell* on June 14.

The molecular target, known as translation factor 4F, is an essential component of the protein synthesis machinery in normal cells and is necessary for cell viability and growth. However, when its activity becomes unregulated, tumors may form. While it is already known that one way of preventing tumor growth is to block the key proteins that drive cancer, there is a complication, said lead researcher Vitaly Polunovsky, Ph.D., professor of medicine in the University’s Medical School and member of The Cancer Center. “There are many different proteins that cooperate to cause and maintain cancer, some of which are not yet identified. What is exciting about this study,” he explained, “is that we’ve identified a critical target, one that is able to stop other cancer-causing proteins from working up and down the line.”

Co-author Peter Bitterman, M.D., professor of medicine, likens it to a series of streams that merge and flow together for a short distance, and then break apart into a series of streams that flow to feed the cancer. “Our work has identified translation factor 4F as the critical point to build a dam—the key chokepoint—in order to prevent the downstream flow of cancerous signals,” he said.

Polunovsky and Bitterman are hopeful that this knowledge will lead to better breast cancer treatment. They are currently working with researchers at the University’s College of Pharmacy on drug development and expect to begin preclinical testing within the next year in

—more—



*Breast cancer, page 2*

collaboration with co-author Douglas Yee M.D., director of The Cancer Center's Breast Cancer Research Program. They believe that the results of the present investigation will spearhead future studies aimed at targeting the protein synthesis machinery as a way to prevent and treat breast cancer.

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## UNIVERSITY OF MINNESOTA

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**NEWS RELEASE****Embargo: Tuesday, June 15, 2004, 3 p.m., C.D.T.****Contact: Ashley Burt, Academic Health Center, 612.624.2449**

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**IMMIGRANTS AT HIGHER RISK FOR DISEASE WHEN TRAVELING*****Travel medicine study reveals inadequate travel care through traditional services***

MINNEAPOLIS / ST. PAUL (June 14, 2004) — A review article from the University of Minnesota reveals that North American immigrants are at a particularly high risk of travel-related illnesses when visiting friends and relatives abroad. Individuals in this situation are known as “visiting friends and relatives,” or VFRs. This heightened risk level is attributed to inadequate protection through traditional pre-travel services and increased exposure to risk factors when traveling.

The review article, which is being published in *JAMA* on Tuesday, June 15, was authored by a team of physicians who specialize in travel medicine and immigrant health care from the University of Minnesota and Canada. The review was partially funded by a Bush Foundation Fellowship, which was awarded to Nina Bacaner, Community University Health Care Center (CUHCC), a Bush Medical Fellow and lead author on the review.

According to Bacaner, visiting friends and relatives are more likely to become ill when traveling because they don't receive the proper pre-travel protection, and the way in which they travel is often more risky.

“Approximately 40 percent of U.S. international air travelers in 2002 were VFRs” said Bacaner. “When VFRs return to their homelands they often don't think they need any special protection because they grew up in that country and assume they are immune to any health risks they might encounter,” said Bacaner. “But, depending on how long they've been away, some of their immunities could be greatly diminished, increasing their chances for infection.”

Bacaner noted that visiting friends and relatives typically do not tell their physicians when they plan to travel and are therefore less likely to receive the proper immunizations. Financial constraints are also a factor in immunization rates, since some shots are not covered by health insurance.

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*Travel medicine study, Page 2*

Just as significant to pre-travel care is the way in which visiting friends and relatives travel. The authors noted that because they stay with their relatives when abroad, they are at greater risk than traditional tourists.

"VFRs generally stay with their families and are immersed with local population when traveling, which means they're often outside of the city in areas with higher mosquito populations, poor water quality, more animal exposure, and poor medical care quality and availability," said Bacaner. "They therefore have a higher chance of injuries and infection and less chance of getting proper care should they become ill."

For example, malaria is a common and serious condition for which visiting friends and relatives typically receive inappropriate protection and treatment. Bacaner noted that many immigrants are prescribed inappropriate malaria prevention for the countries that they're traveling to, which makes them more susceptible. Even if correctly prescribed, patients often do not take the preventive medicine correctly, or at all. Add to this the fact that if a visiting friend or relative does contract malaria when abroad, they are quite likely to be misdiagnosed both abroad and upon their return. In fact, malaria is misdiagnosed as often as 60 percent of the time upon initial consultation with a physician.

"It's not uncommon for a physician to misdiagnose malaria because they either did not take a complete travel history with their patient or because the patient presented with flu-like symptoms without fever," said Bacaner.

Recommendations for addressing this situation include the addition of travel care services at clinics that serve immigrant populations, awareness among physicians of the accelerated vaccine schedule for some diseases, and a better understanding among physicians and visiting friends and relatives of their risks and how to address them.

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*Travel medicine study, Page 3*

The team based its research on a review of data from sources such as MEDLINE, World Health Organization, the Centers for Disease Control and Prevention, the International Society of Travel Medicine, and the American Society of Tropical Medicine, and the U.S. Census Bureau. Authors of the review, who have all worked in developing countries, include:

- Dr. Nina Bacaner, a physician at CUHCC and assistant professor at the University of Minnesota. Approximately 70 percent of her patients are immigrants and visiting friends and relatives. Bacaner recently started a travel clinic at CUHCC focusing on visiting friends and relatives immigrant travelers.
- Dr. William Stauffer, travel medicine physician at the Center for International Health & International Travel Clinic at Regions Hospital in St. Paul, and pediatric travel medicine expert.
- Dr. David Boulware, a medicine/pediatrics physician and infectious disease fellow at the University with previous research experience in wilderness medicine.
- Dr. Patricia Walker, director of the Center for International Health & International Travel Clinic at Regions Hospital. Walker grew up in Southeast Asia and specializes in immigrant health care.
- Dr. Jay Keystone, a professor of medicine and international health at the University of Toronto. Keystone is past president of the International Society of Travel Medicine and a renowned expert in tropical and travel medicine.

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## Media Advisory

For immediate release

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**Contact:** Autumn Reid, Academic Health Center, 612.624.9163  
Ashley Burt, Academic Health Center, 612.624.2449

### U OF MN FACULTY HONORED FOR CONTRIBUTIONS TO HEALTH RESEARCH

MINNEAPOLIS / ST. PAUL (June 15, 2004) — Four University of Minnesota researchers will be awarded the highest recognition of research excellence from the Academic Health Center (AHC) on Tuesday, June 15. The AHC Academy for Excellence in Health Research recognizes faculty who have contributed to the quality of the University of Minnesota through nationally and internationally recognized health-related research.

“The individuals being recognized have performed cutting-edge research crucial to the development of new drugs and therapies, as well as improved health care. Their research has transformed the fields in which they work,” says Frank Cerra, M.D., senior vice president for health sciences.

**WHAT:** University of Minnesota Academy for Excellence in Health Research

**WHO:** **Robert P. Hebbel, M.D.**, is an international leader in the investigation of vascular pathobiology of sickle cell disease, and leads one of the most productive sickle cell research programs in the world.

**Marc K. Jenkins, Ph.D.**, is one of the top immunologists internationally. His method to track T cells and visualize cell-to-cell interactions in vivo help determine how the immune system keeps people healthy and makes them ill.

**Robert L. Kane, M.D.**, is a world leader in geriatric health care research. His extensive work on aging and outcomes of care has resulted in improved care of individuals.

**Hon Cheung Lee, Ph.D.**, is internationally renowned for his research in the study of calcium signaling. In addition, he has been generous in collaborating with colleagues worldwide and nurturing young researchers.

**WHEN:** TUESDAY, June 15, 4-6 p.m.

**WHERE:** Coffman Memorial Union, University of Minnesota  
Campus Club  
300 Washington Ave. S.E., Minneapolis

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Academic Health CenterMayo Mail Code 735  
420 Delaware Street S.E.  
Minneapolis, MN 55455Office:  
A395 Mayo Memorial Building  
612-624-5100  
Fax: 612-625-2129**NEWS RELEASE**

For immediate release

**Contact:** Rebecca Lentz, College of Pharmacy, 612.624.7654  
Ashley Burt, Academic Health Center, 612.624.2449***Study shows that older patients with chronic kidney disease are costly as they transition to dialysis***

MINNEAPOLIS (June 28, 2004)—The costs of treating Medicare patients with chronic kidney disease remain relatively stable until right before patients begin dialysis, when costs increase significantly, according to a study by University of Minnesota researchers.

Researchers found hospitalizations accounted for the majority of the cost increase in the time frame immediately before patients begin dialysis. The findings surprised researchers because fully insured Medicare patients who receive adequate care should have a smoother—and thus less expensive—transition to dialysis, says Wendy St. Peter, an associate professor at the University of Minnesota College of Pharmacy and lead author on the study. The findings are reported in the July 2004 issue of the journal *Kidney International*.

“We believe that optimal management of chronic kidney disease patients may not only extend the time before dialysis is necessary, but it will also reduce future health care expenses, particularly around the start of dialysis,” St. Peter says. “Medicare and other health care payers need to understand how expensive it is to care for chronic kidney disease patients who later go on dialysis. Third-party payers also need to understand the importance of identifying and treating patients as soon as possible. This, we hope, will reduce the high costs associated with dialysis.”

Estimates put the number of U.S. adults with chronic kidney disease at around 20 million. Medicare claims for patients with end-stage renal disease (the final stage of chronic kidney disease, when dialysis is needed) total more than \$16 billion annually. This amount is spent on a relatively small number of patients (about 300,000).

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*Kidney disease costs, Page 2*

Researchers looked at Medicare claims from 109,321 patients who received care for chronic kidney disease from 1995 to 1998. They looked at the costs associated with caring for chronic kidney disease patients during the two years before they began dialysis and the six months after they started dialysis. Researchers adjusted the dollar amount of the claims for inflation.

The average age of the patient was 75, and 51 percent were males.

The research indicates that Medicare costs for older patients with chronic kidney disease escalate rapidly a few months before needing dialysis to survive. No previous studies have examined costs in a group of elderly patients with chronic kidney disease for such an extensive time period.

The research shows that hospitalization costs were the major cost driver throughout the study. Patients with chronic kidney disease who also had diabetes or cardiovascular disease incurred higher costs compared with those who didn't have other diseases. The researchers concluded that that timely management of chronic kidney disease and other conditions may reduce future hospitalizations and bring down the cost of managing end-stage renal disease.

"Although yet to be proven in a prospective clinical trial, early diagnosis of chronic kidney disease and timely interventions for complications of chronic kidney disease may prevent avoidable morbidity and cost," the authors wrote.

St. Peter says there are three implications of the study:

- Sicker patients are being cared for under the Medicare end-stage renal disease program, a trend that will increase costs.
- Better management of chronic kidney disease and other conditions such as diabetes, hypertension and heart disease may delay the onset of end-stage renal disease and decrease future health care expenses by decreasing hospitalizations.
- Prospective studies are needed to determine whether spending money up front on preventive therapies and health maintenance in patients with chronic kidney disease will reduce future health care costs.

*Kidney disease costs, Page 3*

Many patients with chronic kidney disease have other conditions, including diabetes, hypertension and cardiovascular disease. Researchers examined the effect of those conditions on claims for chronic kidney disease and discovered even higher costs immediately before and after starting dialysis than in patients who did not have these other conditions. This further implies the need for better management of coexisting conditions in patients with chronic kidney disease, St. Peter says.

"If the comorbidity among patients accepted to the end-stage renal disease program continues to increase, the impact on the future cost of the end-stage renal disease program can be substantial and may require a reevaluation of the current Medicare payment system," the researchers wrote.

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## **Media Advisory/Photo Opportunity** For Immediate Release

### **U OF MN ACADEMIC HEALTH CENTER AT THE STATE FAIR** *Activities for Saturday, August 28, and Sunday, August 29*

**Contact:** Ashley Burt, Academic Health Center, 612-624-2449

#### **Saturday, August 28:**

##### **Medical School presents:**

Visitors will learn about the anatomy of the heart by viewing two heart specimens.

**Give-Aways:** tongue depressor

**Place:** Crossroads Building, Dan Patch Avenue, Academic Health Center exhibit

**Time:** 9 a.m.—3 p.m.

##### **Department of Family Medicine and Community Health:**

View samples of fat and muscle tissue and find out the latest medical advice on nutrition.

**Place:** Crossroads Building, Dan Patch Avenue, Academic Health Center exhibit

**Time:** 3 p.m.—9 p.m.

#### **Sunday, August 29:**

##### **Neuroscience presents:**

Visitors will learn about the brain, spinal cord, and nervous system by looking at actual brain samples. Free pencils with brain erasers will be handed out.

**Give-Aways:** brains-on-a stick (pencil with brain eraser)

**Place:** Crossroads Building, Dan Patch Avenue, Academic Health Center exhibit

**Time:** 9 a.m.—9 p.m.

#### **Ongoing Daily Exhibits:**

##### **Miracle of Birth**

U of MN veterinary students will assist with livestock births, demonstrate birthing procedures, and answer questions.

**Place:** Miracle of Birth Center, Children's Barnyard, Judson Avenue and Nelson Street

**Time:** 8 a.m. – 9 p.m. daily

##### **Free Blood Pressure Screenings**

**Place:** Crossroads Building, Dan Patch Avenue, Academic Health Center exhibit

**Time:** noon—2 p.m. daily

##### **Live Telemedicine Demonstrations**

U of MN doctors demonstrate the technology of telemedicine by examining moles and skin marks that could potentially be cancerous.

**Place:** Crossroads Building, Dan Patch Avenue, Academic Health Center exhibit

**Time:** 10 a.m.-noon



**Surgery Suite**

Assisted by U of MN veterinary students, veterinarians inform the public of the importance of spaying and neutering dogs and cats while demonstrating live surgeries.

**Place:** Pet Center, Underwood Street and Murphy Avenue, Surgery Suite

**Time:** 10 a.m., noon, 2 p.m., and 4 p.m. daily

**-end-**

# UNIVERSITY OF MINNESOTA

*Twin Cities Campus*

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## **Media Advisory/Photo Opportunity** For Immediate Release

### **U OF MN ACADEMIC HEALTH CENTER AT THE STATE FAIR Activities for Thursday, August 26**

**Contact:** Ashley Burt, Academic Health Center, 612-624-2449

#### **College of Veterinary Medicine presents:**

Experts from the state's only College of Veterinary Medicine will answer questions about caring for your pet's health. Whether you want to know how to care for Fido's teeth or what to do with your pet in emergency, experts will be on hand with the answers.

**Place:** Crossroads Building, Dan Patch Avenue, Academic Health Center exhibit

**Time:** 9 a.m.—9 p.m.

#### **Ongoing Daily Exhibits:**

##### **Miracle of Birth**

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**Place:** Miracle of Birth Center, Children's Barnyard, Judson Avenue and Nelson Street

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## NEWS RELEASE

For immediate release

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**Contact:** Ashley Burt, Academic Health Center, 612.624.2449  
Rebecca Lentz, College of Pharmacy, 612.624.7654

### U OF M RESEARCHER RECEIVES NEARLY \$1 MILLION TO STUDY HOW GENETIC DIFFERENCES AFFECT MEDICATION USE

MINNEAPOLIS / ST. PAUL (Aug. 27, 2004) — A University of Minnesota researcher received a nearly \$1 million grant from the National Institutes of Health (NIH) to study how genetic differences affect whether people will experience dangerous drug interactions and how to adjust medications to avoid those interactions.

The NIH awarded the \$962,357 grant to College of Pharmacy Professor Timothy S. Tracy, Ph.D., to study how genetic “flaws” affect the body’s response to combinations of medications and what dosing adjustments are necessary.

“People may have dysfunctional enzymes that break down drugs,” Tracy says. “The question we’re asking is, how do these genetic differences affect a person’s susceptibility to drug-to-drug interaction.”

The flaws are found on the enzymes—the parts of the genetic structure to which drug molecules bond—and cause people to react differently when taking certain combinations of medications.

Researchers already know that people’s genetic makeup determines their responses to drugs, a science known as pharmacogenomics. The responses can vary in either how quickly the body metabolizes the drugs or the actual effects the drug has on the person.

Ultimately researchers hope to use a computer model to determine how an individual will respond to drugs and thus reduce potentially serious drug interactions before a drug or combination of drugs is given. It’s what known as individualized drug therapy, a process that allows providers to customize medication dosing for each patient.

—more—



*U of M grant to study how genetic differences affect medication use , Page 2*

"Eventually we'll have a computer program that says 'I already know the interactions between Y and Z. Based on that, I can know what the interactions are between X and Z,'" Tracy says.

It's unclear whether people with the genetic flaws require the same medication dosing adjustments as people without the flaws. And that question is what Tracy will study.

In a drug interaction, competing drug molecules try to bond to the same enzyme. Having competing drug molecules try to attach to the same enzyme is like a game of musical chairs: One of them will get left out, Tracy says. Two drug molecules can compete to sit on the same spot on an enzyme in the body, Tracy says. But if there's only room for one molecule on that enzyme, the displaced second drug molecule will not be able to bind to the enzyme and thus, not be broken down, he says, creating a potentially serious drug interaction.

To complicate things further, a person's genetic makeup may alter whether the first drug molecule bonds to an enzyme or whether the molecule is displaced by another drug and left to find a new home. In other words, different genetic structures in an enzyme may increase or decrease the degree to which two drugs compete for the same enzyme and thus alter the probability of a drug interaction.

If the drugs compete to a greater degree in someone with the particular genetic flaws researchers will study, the dose of the drug will have to be decreased more than expected. If the drugs compete to a lesser degree, the dose of the drug will have to be increased.

One situation in which this kind of change may have serious consequences is when patients take blood thinners. Dosing for drugs such as blood thinners requires an extremely close margin: Too little drug, and the patient can form a blood clot. Too much drug, and the patient can bleed to death. If patients take certain medications while taking blood thinners, researchers know the dose of the blood thinner must be reduced.

In this example, it's unknown whether people with the genetic defects should have the same dosing adjustments for blood thinners and other drugs as people without the defect. By the end of the study, that's something Tracy and his team expect to know.

—more—

*U of M grant to study how genetic differences affect medication use , Page 3*

Researchers will look at two enzymes in the body that most often have defects. They will look at the effects of 12 drugs on each enzyme. Since there are multiple—often three or four—defects on each enzyme, researchers will study dozens of combinations of drugs and genetic defects.

Researchers expect to find that people with the defect have different susceptibilities to an interaction and require a different adjustment of their medication from most people. "In fact, we expect to find that we must treat them differently than most of the population," Tracy says.

Researchers are recruiting 150 subjects, some of whom will have the genetic defect. The researchers will compare those with the defect to those without the defect to see how the specified drugs interact. Researchers are also conducting test tube trials.

*The College of Pharmacy, the only school of pharmacy in Minnesota, offers its program on the Twin Cities and Duluth campuses. Founded in 1892, the College of Pharmacy educates pharmacists and scientists and engages in research and practice to improve the health of the people of Minnesota and society. The college is part of the Academic Health Center, which is home to the University of Minnesota's seven health professional schools and colleges as well as several health-related centers and institutes.*

—end—

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## Media Advisory

For immediate release

**Contact:** Ashley Burt, Academic Health Center, 612.624.2449

### **OBESITY EPIDEMIC TO BE ADDRESSED BY INTERNATIONALLY RECOGNIZED EXPERTS**

***U of M hosts three conferences in September on obesity and nutrition***

MINNEAPOLIS / ST. PAUL (September 9, 2004) — “We’re in the midst of an obesity epidemic,” says Mary Story, Ph.D., professor of epidemiology, University of Minnesota School of Public Health. To address this epidemic, Story and colleagues at the University of Minnesota School of Public Health will host several conferences in September. The conferences will be an opportunity for community members to hear about the latest information on obesity and nutrition from some of the world’s leading experts in these areas. The three conferences are: The First International Ancel Keys Symposium, “Food Fight: A Dialogue on Food Industry Litigation and the Obesity Epidemic,” and the Martinson Lecture on Health Promotion and Disease Prevention.

Conference details are below:

#### **The First International Ancel Keys Symposium**

- WHAT:** This symposium will honor **Ancel Keys**, who turned 100 this year. Keys is a former School of Public Health researcher, perhaps best known as the inventor of K rations—the ready to eat meal carried by U.S. troops during World War II.
- WHO:** Twelve internationally eminent speakers will discuss the causes of obesity and prevention methods.
- WHEN:** Sunday, Sept. 12 and Monday, Sept. 13
- WHERE:** Minneapolis Hilton Hotel, 1001 Marquette Ave. S., Minneapolis, 55403-2440
- REGISTRATION:** For registration fees and a schedule of presenters, go to <http://www.epi.umn.edu/about/keysevent.shtml>

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*University of Minnesota obesity conferences, page 2*

**Foods and Health: School of Public Health 2004-05 Roundtable Series**

**WHAT:** "Food Fight: A Dialogue on Food Industry Litigation and the Obesity Epidemic"

**WHO:** **Michael Ciresi**, Kaplan, Miller & Ciresi, LLP, **David D. Etzwiler**, Medtronic Foundation and Government Affairs, **Simone French**, U of M School of Public Health, **Peter Gross**, Faegre & Benson, **Hubert H. "Skip" Humphrey III**, U of M School of Public Health and Tunheim Partners, **Joseph M. Price**, Faegre & Benson, **Mary Story**, U of M School of Public Health, and **Margo G. Wootan**, Center for Science in the Public Interest. *Industry representative invited.*

**WHEN:** Tuesday, Sept. 14, 8-11 a.m.

**WHERE:** Coffman Memorial Union, University of Minnesota, 300 Washington Ave. S.E., Minneapolis, 55455

**REGISTRATION:** Roundtable is free but registration is requested. Go to <http://www.cpheo.umn.edu/roundtable/> for program details, parking information, on-line registration, and information on live video streaming.

**Martinson Lecture on Health Promotion and Disease Prevention**

**WHAT:** The Ninth Annual Carl J. Martinson Lecture on Health Promotion and Disease Prevention: "The Politics of Obesity Prevention: Personal Responsibility versus Public Health"

**WHO:** **Marion Nestle**, professor in the Department of Nutrition, Food Studies, and Public Health at New York University. Prof. Nestle is also the award-winning author of such books as *Safe Food: Bacteria, Biotechnology, and Bioterrorism* and *Food Politics: How the Food Industry Influences Nutrition and Health*.

**WHEN:** Friday, Sept. 17, reception 9 a.m., lecture 10-11 a.m.

**WHERE:** 2-530 Moos Tower, University of Minnesota, 515 Delaware St. S.E., Minneapolis, 55455

**REGISTRATION:** Free and open to the public. No registration is necessary. For more information, go to <http://www.sph.umn.edu/news/martinson/>

—end—

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## NEWS RELEASE

For immediate release

**Contact:** Mary Lawson, Cancer Center, 612.624.6165  
Molly Portz, Academic Health Center, 612.625.2640

### **U of M TESTS VACCINE IN HOPES OF PREVENTING CERVICAL CANCER** *Human papillomavirus linked to cervical cancer*

**MINNEAPOLIS / ST. PAUL (Sept. 20, 2004)** — The University of Minnesota will begin testing a vaccine against the human papillomavirus (HPV), a sexually transmitted infection that can cause cervical cancer. Researchers hope that by preventing HPV with this vaccine, cervical cancer rates will also decline. The University is part of an international clinical trial testing this vaccine.

One of the study's principal investigators, Levi Downs, M.D., Cancer Center member and assistant professor, department of obstetrics, gynecology and women's health at the University of Minnesota's Medical School, said: "Up to 80 percent of sexually active women have been infected with HPV at some time. In the United States, HPV infection is linked to 10,000 cases of cervical cancer every year and 200,000 cases worldwide." Previous studies have already indicated that this vaccine is effective in preventing the most common type of HPV, he added. "The success of this study could have a major impact on women's health worldwide."

The study is seeking to enroll healthy women ages 15-25. Women do not have to be sexually active to participate. The double-blind study will last five years, with the control group receiving hepatitis A vaccine.

Women who are interested in participating in the study can find out more information by calling 612-624-2620.

*The Academic Health Center is home to the University of Minnesota's six health professional schools and colleges as well as several health-related centers and institutes. Founded in 1851, the University is one of the oldest and largest land grant institutions in the country. The AHC prepares the new health professionals who improve the health of communities, discover and deliver new treatments and cures, and strengthen the health economy.*

—end—



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**NEWS RELEASE**

For immediate release

Contact: Sara E. Buss, Academic Health Center, 612-624-2449  
John Halstrom, Center for Spirituality and Healing, 612-624-2141

**U OF M STRESSES IMPORTANCE OF BEING AN INVOLVED AND  
INFORMED HEALTH CARE CONSUMER THROUGH NEW ONLINE SERIES**

MINNEAPOLIS / ST. PAUL (October 6, 2004) — Responding to the nation's ever-increasing desire for useful and impartial health care information, the University of Minnesota's Center for Spirituality and Healing has developed an informative, online learning series for health care consumers titled *Keeping U Well*. In celebration of the series launch, the Center is offering its first title, *Taking Charge of Your Health*, free of charge. Through interactive tools and balanced information, the online series will enable consumers to become insightful, well-informed health care consumers. *Taking Charge of Your Health* can be accessed at [www.csh.umn.edu/freedemo](http://www.csh.umn.edu/freedemo).

Not long ago, people relied solely on their doctor for directing their health care. With today's average office visit lasting only 15 minutes, many health care providers simply do not have time to address patients' needs — particularly when it comes to questions about complementary care. "Recognizing a need for practical, useful information, we created these modules with the belief that each of us must take responsibility for our own health care," said center spokesperson John Halstrom.

*Taking Charge of Your Health* will help consumers become their own best advocates by teaching them to make informed choices, find and communicate with health care providers who meet their needs, evaluate health information on the Web, and explore options in healing, including complementary therapies.

"Because we believe so strongly that everyone benefits by becoming an informed consumer and because positive health care experiences are essential to health and wellness, we are offering *Taking Charge of Your Health* free of charge," Halstrom said. Future titles, offered for a fee, will feature other topics in healing options.

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*New online series for health care consumers, page 2*

The center's *Keeping U Well* online consumer series helps fulfill the University's mission of giving back to the state by improving the health and wellness of all Minnesotans. The center has also completed a professional series to help educate health professionals about other healing options, including complementary therapies. Local area hospitals are in the process of purchasing the professional series. Currently, Woodwinds Hospital uses the series to educate their staff, which includes module topics such as botanical medicine, aromatherapy, and traditional Chinese medicine.

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For Immediate Release

Contact: Molly Portz, Academic Health Center, 612.625.2640  
Sara Buss, Academic Health Center, 612.624.2449**U OF M RECEIVES GRANT TO STUDY SEXUAL RISK FACTORS IN ADOLESCENTS**

MINNEAPOLIS/ST. PAUL (Oct. 7, 2004) – The University of Minnesota received a research grant from the Centers for Disease Control and Prevention to study the unique and shared risk factors for child sexual abuse, sexual assault, and youth violence. The lack information about these risk factors is a major obstacle in designing prevention programs for young sexual perpetrators.

The researchers will identify the risk factors by examining these young perpetrators attitudes towards intimacy, consensual sexual experiences, masculinity, and beliefs about sexuality, including self-reported sexual behavior, interests and fantasies.

“Sexual crimes, especially those that target children, lead to public outrage and calls for intervention. However, our current knowledge severely restricts the ability of society to respond to these behaviors. Our study is designed to advance the knowledge by determining if there are factors that are unique to sexual abuse, sexual aggression, and non-sexual violence. If such factors exist, prevention and treatment programs can be specifically tailored to address each problem individually. If not, then existing programs that have proven successful in prevention of delinquent behavior should also be effective in preventing sexual abuse and sexual assault”, said Michael Miner, Ph.D., L.P., principal investigator and associate professor of family practice and community health in human sexuality.

This three-year study is a collaboration between the University’s Program in Human Sexuality, treatment programs for juvenile sex offenders, and juvenile probation departments. The results will be applied to treatment programs in conjunction with Stop It Now, a child sexual abuse prevention organization.

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**NEWS RELEASE****Embargoed until: 4 p.m. EST, Tuesday, October 12, 2004****Contact:** Molly Portz, Academic Health Center, 612.625.2640  
Sara Buss, Academic Health Center, 612.624.2449**NEW JAMA STUDY SHOWS WEIGHT LOSS SURGERY IMPROVES  
OR ELIMINATES LEADING OBESITY RELATED HEALTH CONDITIONS**  
*U of M Professor Lead Author of First 'Meta-Analysis' Ever Done on  
Weight Loss Surgery and its Effect on Disease*

MINNEAPOLIS/ST. PAUL (Oct. 13, 2004) -- According to a study published in the October 13 issue of the *Journal of the American Medical Association (JAMA)*, weight-loss surgery improved or eliminated diabetes, hypertension, sleep apnea, and high cholesterol in the vast majority of morbidly obese patients.

In what is known as a meta-analysis, researchers for the first time systematically reviewed more than 130 studies that included more than 22,000 weight loss surgery patients and reported on the impact weight-loss surgery had on these four obesity-related conditions.

"This study clearly demonstrates that the benefits of weight loss surgery go far beyond weight loss for most patients," said Henry Buchwald, M.D., Ph.D., professor of surgery and lead author of the study. "Weight-loss surgery appears to be the most effective treatment for diabetes, hypertension, obstructive sleep apnea, and high cholesterol in morbidly obese patients."

Morbid obesity is defined as 100 or more pounds overweight or a body mass index (BMI) of 40 or more. According to the American Society of Bariatric Surgery (ASBS), more than 120,000 people will undergo weight loss or bariatric surgery this year and about 8 million people in the U.S. are morbidly obese.

According to the study, diabetes was eliminated in 76.8 percent of patients, while 86percent eliminated or improved their condition. Hypertension was eliminated in 61.7 percent of patients and resolved or improved in 78.5 percent. Obstructive sleep apnea or sleep-disordered breathing was eliminated in 85.7 percent of patients and high cholesterol levels or hyperlipidemia decreased in more than 70 percent of patients. The mean percentage of excess weight loss was 61.2 percent for all patients.

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*JAMA Study/Page 2*

Two-thirds of adult Americans are overweight or obese. Government reports list obesity as the second leading cause of preventable death, killing about 400,000 Americans each year. Potentially fatal diseases associated with obesity such as Type II diabetes, hypertension, heart disease, asthma, stroke, and several forms of cancer are on the rise throughout the world. The World Health Organization (WHO) reports that obesity-related diseases account for more than 2.5 million deaths per year worldwide.

"Weight-loss surgery may be a life-saving operation for morbidly obese patients," said Eugene Braunwald, M.D., Department of Medicine, Brigham and Women's Hospital, Harvard Medical School, Boston, Mass., a co-author of the study and a cardiologist. "Doctors and patients should evaluate this when considering weight-loss surgery."

In 1991, the National Institutes of Health (NIH) established surgical guidelines for the treatment of morbid obesity in the conjunction with significant illnesses associated with obesity.<sup>i</sup> The guidelines indicated that weight-loss surgery is an effective long-term treatment for morbid obesity.

In addition to Buchwald and Braunwald, co-authors of the study included Yoav Avidor, M.D., Ethicon Endo-Surgery, Cincinnati, Ohio; Michael D. Jensen, M.D., Mayo Clinic Department of Medicine, Rochester, Minn.; Walter Pories, M.D., Department of Surgery, East Carolina University School of Medicine, Greenville, N.C.; and Kyle Fahrback, Ph.D., and Karen Schoelles, M.D. from MetaWorks, Inc., Medford, Mass.

**Safety Data**

Mortality at 30 days or less after surgery was 0.1 percent for purely restrictive procedures, 0.5 percent for gastric bypass procedures, and 1.1 percent for biliopancreatic diversion or duodenal switch procedures, this data compares favorably with the accepted operative mortality rates for other major surgical procedures.

Though not part of the meta-analysis, the co-authors pointed out that a recent study of more than 1,000 gastric bypass surgery patients published in the *Annals of Surgery* in September 2004 showed those that had surgery had 89 percent fewer deaths more than five years after surgery, compared with morbidly obese patients who did not have surgery. The study is entitled "Surgery Decreases Long-Term Mortality in Morbidly Obese Patients."

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*JAMA Study/Page 3***Methodology**

Researchers conducted an electronic literature search of MEDLINE, Current Contents, and the Cochrane Library databases as well as manual reference checks of all bariatric surgery articles published in English between 1990 and 2003. Researchers identified a total of 136 fully extracted studies for a total of 22,094 patients. Nineteen percent of the patients were men and 72.6 percent were women, with a mean age of 39. The mean pre-operative BMI was 46.9. A random effects model was used in the meta-analysis.

The study was sponsored by Ethicon Endo-Surgery, Inc. The sponsor had no role in the collection, management, analysis, and interpretation of the data or the preparation, review, or approval of the manuscript.

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<sup>1</sup> Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults. Executive Summary. National Institutes of Health (NIH), June 1998.

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## NEWS RELEASE

**Contact:** Sara Buss, Academic Health Center, 612-624-2449  
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### **NATIONAL ACADEMY OF SCIENCES NAMES TWO U OF M PROFESSORS TO INSTITUTE OF MEDICINE** *One of highest honors in field of medicine*

MINNEAPOLIS / ST. PAUL (Oct. 18, 2004) — University of Minnesota professors Apostolos Georgopoulos, M.D., Ph.D, and Michael Osterholm, M.P.H, Ph.D., have been named to the Institute of Medicine of the National Academy of Sciences. Institute of Medicine (IOM) membership is one of the highest honors in the field of medicine, given to those who have contributed significantly to medical sciences, health care, and public health.

Georgopoulos, professor of neuroscience and director of the Brain Sciences Center at the Minneapolis Veterans Affairs (VA) Medical Center, and Osterholm, director of the University's Center for Infectious Disease Research and Policy and professor of public health, are two of 65 new members who have been elected through a highly selective process. The institute's total active membership is now 1,416.

With the honor comes responsibility, as Institute members devote a significant amount of volunteer time to IOM committees, which study a broad range of health policy issues. Founded in 1970, the institute is devoted to advancing health professions, promoting health-related research, and improving health care. It has become recognized as a national, independent resource for analysis and recommendations on health issues. In addition to health professionals, the IOM includes members from fields such as natural, social, and behavioral sciences, as well as law, administration, engineering, and the humanities. Only recently have public health leaders been named to the institute.

Georgopolous is known for his work involving the motor cortex, the area of the brain controlling voluntary movements, as well as the brain mechanisms that contribute to cognitive function.

"He is one of the most outstanding cognitive neurologists we have in the world," said

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*U of M researchers elected to IOM, page 2*

Dean Deborah Powell, M.D., medical school. "He has a breadth of knowledge of neuroscience both at the basic and human disease level that we absolutely need for the Institute of Medicine."

Osterholm is an internationally recognized expert in public health and a member of the faculty at the University's School of Public Health. He is Associate Director of the National Center for Post Harvest Food Protection and Defense. He has been at the national and local forefront of addressing national issues related to public health preparedness, infectious disease, bioterrorism, and agricultural and food biosecurity.

"Having two faculty members recognized by the IOM in one year speaks to the University's commitment to sound, interdisciplinary research, and our leadership in public policy and public health," said Frank B. Cerra, M.D., senior vice president for health sciences.

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## **NEWS RELEASE**

**For immediate release**

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Rebecca Lentz, College of Pharmacy, 612-624-7654

### **U OF M ESTABLISHES CHAIR FOR ORPHAN DRUG DEVELOPMENT *Center to research therapies for rare diseases***

MINNEAPOLIS / ST. PAUL (Oct. 19, 2004) — The University of Minnesota College of Pharmacy named Jim Cloyd, Pharm.D., the first occupant of the Weaver Endowed Chair in Orphan Drug Development. The chair is named for Dean Emeritus Lawrence C. Weaver, who has a passion for developing therapies for rare diseases.

Cloyd, who joined the College of Pharmacy in 1976, is professor and associate dean for research. He will serve as director of the new Center for Development of Drugs for Rare Diseases at the University of Minnesota. The center will conduct research— with a focus on translational and clinical research—at all phases of the drug development process. In addition, the center will serve as a resource where scientists and clinicians can seek assistance in orphan drug development. Scientists in the center will also work closely with private firms to bring new products to market.

“Dr. Cloyd brings a long-term interest in orphan drug development, a strong vision for creating the Center for Development of Drugs for Rare Diseases, experience in drug development research, and excellent organization skills that will help make Dr. Weaver’s dream a reality,” said Marilyn K. Speedie, Ph.D., dean of the College of Pharmacy.

The college will host a scientific advisory board that will meet frequently to advise center scientists about projects and provide links to expertise throughout the world. Cloyd will work with scientists and clinicians investigating rare diseases and collaborate on projects and grants directed at developing orphan drugs. Therapies for rare diseases may come from discovery of new drugs based upon their biological and genetic mechanisms or through new uses of existing drugs.

Congress passed laws creating incentives for development of drugs for rare diseases, and

—more—

*Center for rare diseases established, page 2*

through the establishment of the center, the college is responding to that need. The center will seek funding from government, nonprofit, and business organizations to support its activities. The Food and Drug Administration Office of Orphan Products Development and the National Institutes of Health Office of Rare Diseases fund research to identify and develop orphan drugs.

Cloyd holds a B.S. in pharmacy from Purdue University and a Pharm.D., from the University of Kentucky, where he also completed his residency. He completed a postdoctoral fellowship at the University of Washington. He was previously head of the Department of Pharmacy Practice at the University of Minnesota College of Pharmacy from 1982 to 1986.

In 1981, Cloyd received the Morse-Amoco Foundation Award, given to outstanding University teachers. He is also a member of the University's Academy of Distinguished Teachers. In 1991 he was inducted as a fellow in the American College of Clinical Pharmacy. In 2000 he was inducted as a fellow in the Academy of Pharmaceutical Research and Science of the American Pharmaceutical Association. He received the Lawrence C. and Delores M. Weaver Medal in 2001 from the University of Minnesota College of Pharmacy for outstanding contributions to the college.

He has published numerous papers in peer-reviewed publications on epilepsy and the elderly and is co-principal investigator on a 10-year, multi-million dollar grant from the NIH studying epilepsy in the elderly.

For the last 30 years, Cloyd has focused his teaching, clinical practice, and research on the safer and effective use of antiepileptic drugs. Beginning in 1988, Cloyd and his colleagues led a successful effort to develop rectal diazepam, an orphan drug product for home treatment of seizure emergencies. The drug changed the lives of patients with refractory epilepsy and their families.

*The College of Pharmacy, the only school of pharmacy in Minnesota, offers its program on the Twin Cities and Duluth campuses. Founded in 1892, the College of Pharmacy educates pharmacists and scientists and engages in research and practice to improve the health of the people of Minnesota and society. The college is part of the Academic Health Center, which is home to the University of Minnesota's six health professional schools and colleges as well as several health-related centers and institutes.*

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## **MEDIA ALERT**

*Office:  
A395 Mayo Memorial Building  
612-624-5100  
Fax: 612-625-2129*

**Contact:** Jonell Rusinko, Academic Health Center, 612.624.5680 (office),  
612.899.7471 (pager)  
Claudia Kanter, School of Dentistry, 612.625.0402 (office)

## **OPPORTUNITY TO BE A DENTIST FOR A DAY**

### *U of M School of Dentistry to Test State-of-the-Art Dental Education Simulation Equipment*

**What You'll See:** Opportunity to be a dentist for a day and test state-of-the-art dental simulation equipment, including dental chairs equipped with upper-torso mannequins that have realistic heads and mouths.

**When:** Wednesday, Nov. 3, 10:30 a.m. - noon or 1-5 p.m.  
Thursday, Nov. 4, 8 a.m. - noon or 1-5 p.m.

**Where:** School of Dentistry, 15-110 Moos Tower, University of Minnesota  
Minneapolis campus (515 Delaware St. S.E.)

Parking available in the Fairview University Clinic parking ramp

**Background:** On November 2-4, students and faculty at the University of Minnesota School of Dentistry will experience the future of dental education:

- Lifelike mannequins equipped with computer monitors,
- 3-D displays and laser-tracked hand pieces that measure the depth and angle of tooth preparation,
- overlap the student's performance against an ideally prepared tooth, and
- visual and statistical evaluation of the students' performance and skills.

Each simulation station will be equipped with hand pieces, water, and suction. This type of instructional setting will permit students to advance at their own pace to develop their technical skills to a high level so that they can make a smoother transition to clinic settings where they will perform procedures on actual patients.

The school proposes to renovate its pre-clinical laboratories and construct a state-of-the art simulation clinic. Modern facilities will allow faculty to utilize instructional equipment at the forefront of technology and new approaches to teaching. Students will learn in an environment that matches their high quality and maximizes faculty strengths.



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## **MEDIA ALERT**

For Immediate Release

**Contacts:** Sara E. Buss, Academic Health Center, 612-624-2449  
Jonell Rusinko, Academic Health Center, 612-624-5680

### **U OF M STUDENTS PLAN ANATOMY MEMORIAL SERVICE**

**WHAT:** A memorial service honoring those who donated their bodies through the University of Minnesota's anatomy bequest program.

**WHEN:** 6:30 p.m., Tuesday, Nov. 16, 2004  
7 p.m. service, with reception to follow

**WHERE:** University of Minnesota  
Ted Mann Concert Hall  
2128 Fourth St. South, Minneapolis

**BACKGROUND:** Every year, university medical and dental students plan a non-denominational memorial service to recognize the people who donate their bodies to help anatomy students learn. It is because of the generosity of the donors and their families that university students develop a better understanding of the human body and how it functions. Family members of the donors are invited to attend the ceremony. Faculty, staff, and students attend and participate in this service to publicly express their appreciation to the donors and their families.

For more information about the university's Anatomy Bequest Program, visit <http://www.ahc.umn.edu>

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Minneapolis, MN 55435Office:  
A395 Mayo Memorial Building  
612-624-5100  
Fax: 612-625-2129**NEWS RELEASE****Embargo until: 3 p.m. (C.T.) Tuesday, Nov. 23, 2004****Contact:** Jonell Rusinko, Academic Health Center, 612.624.5680/pager 612.899.7471  
Sara Buss, Academic Health Center, 612.624.2449**LOW-GLYCEMIC LOAD DIET MAY IMPROVE ABILITY TO STAY ON DIET LONGER*****University of Minnesota Researcher Also Finds the Diet May Improve Cardiovascular Risk Factors***

MINNEAPOLIS / ST. PAUL (Nov. 23, 2004)—Low-glycemic load diets, those low in sugars with moderate levels of carbohydrates and not as low in fat and protein, may lower metabolism less when compared with low-fat diets, making the dieters feel less tired, cold and hungry, as well as improve cardiovascular risk factors, according to an article in the Nov. 24 issue of *The Journal of the American Medical Association*.

The research found that composition of diet, the sources of calories, can affect physiological adaptations that defend body weight. On a low-glycemic load diet, resting energy expenditure (REE) decreased less than with the low-fat diet, which could amount to several pounds of weight change per year, given this effect would persist over a long term. For comparative purposes, a similar effect on caloric expenditure could be obtained by walking a mile per day (80 kcal/d).

Reduction in glycemic load may aid in the prevention or treatment of obesity, cardiovascular disease, and type 2 diabetes. For example, insulin resistance decreased by more than twice as much with weight loss in the low-glycemic load vs. the low-fat group.

“Composition of diet may impact how dieters respond to weight loss,” said lead researcher, Mark Pereira, Ph.D., assistant professor in epidemiology at the University of Minnesota. “On a typical low-fat diet, the participants tended to experience more perceived hunger and a slower metabolic rate, which may make it more difficult to stay on the diet, while those on the low-glycemic load diet did not feel as hungry and had a faster metabolic rate.”

Pereira and colleagues at Harvard University designed a randomized parallel-design study of 39 over-weight or obese young adults aged 21 to 40 years who received an energy-restricted diet, either low-glycemic load or low-fat. Participants' body composition, REE, blood cholesterol, blood pressure and blood glucose and insulin levels were measured and studied before and after 10 percent weight loss.



The research found that physiological adaptations that serve to defend baseline body weight can be modified by dietary composition. REE declined by 80 kcal/d less and hunger was less on the low-glycemic load diet vs. the low-fat diet during weight loss, similar to results from a prior short-term study in the *American Journal of Clinical Nutrition*. In addition, the low-glycemic load diet had beneficial effects on several obesity-related risk factors compared with a low-fat diet that was consistent with current nutritional guidelines.

Editor's Note: This work was supported by research grants from the National Institute of Diabetes and Digestive and Kidney Diseases, the National Institutes of Health, General Mills Corporation, and Charles H. Hood Foundation.

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## NEWS RELEASE

**Contact:** Mary Lawson, University of Minnesota Cancer Center, 612-624-6165  
Sara E. Buss, University of Minnesota Academic Health Center, 612-624-2449

### U of M CANCER CENTER RECEIVES RENEWED FUNDING FOR TOBACCO RESEARCH

MINNEAPOLIS / ST. PAUL (Nov. 22, 2004) – The University of Minnesota Cancer Center's Transdisciplinary Tobacco Use Research Center (TTURC) will receive more than \$9 million in new funding over the next five years from the National Institutes of Health (NIH) to continue its research on tobacco use and addiction.

“With the renewed funding, we intend to develop a better understanding of why some tobacco users are resistant to treatment and to continue finding ways to provide effective treatments for these individuals,” says Dorothy Hatsukami, Ph.D., director and principal researcher of the Cancer Center's TTURC program. Hatsukami leads a research team of more than 40 people involved in projects ranging from basic science investigations to public policy issues.

The Cancer Center's TTURC program was established in 1999. During the past five years, researchers have studied ways to reduce the harmful effects of secondhand smoke exposure, decrease smoking in patients with heart disease, and investigated innovative methods to reduce smoking among people who are unable or unwilling to quit using tobacco.

The Cancer Center's TTURC is one of seven university-based programs in the United States awarded renewed funding from NIH for tobacco research.

*The Academic Health Center is home to the University of Minnesota's six health professional schools and colleges as well as several health-related institutes and centers, including the Cancer Center. Founded in 1851, the University is one of the oldest and largest land grant institutions in the country. The AHC prepares the new health professionals who improve the health of communities, discover and deliver new treatments and cures, and strengthen the health economy.*

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Fax: 612-626-2111**Offices located at:  
410 ChRC  
426 Church Street S.E.  
Minneapolis, MN 55455-0374***NEWS RELEASE****For immediate release****Contact:** Sara Buss, Academic Health Center, 612-624-2449  
Jonell Rusinko, Academic Health Center, 612-624-5680**PUBLIC HEALTH PIONEER ANCEL KEYS PASSES AWAY**  
***Keys was leading researcher in cholesterol and heart disease***

MINNEAPOLIS/ST. PAUL (Nov. 22, 2004)—Ancel Keys, pioneer in the field of public health, passed away Sunday evening at the age of 100. Keys was most well-known for his research establishing the connection between diet, cholesterol, and heart disease.

“For the School of Public Health, his long career has been the model of excellence and world-wide impact on human life and progress that we dream of, believe in, and strive for,” said John Finnegan, Dean of the School of Public Health. “It has been said that we stand on the shoulders of giants. Ancel Keys was truly an intellect of that stature.”

Keys pioneered studies into how certain kinds of diets can lead to clogged arteries and heart attacks, and with his wife Margaret, authored a book promoting the Mediterranean diet.

In 1940, Keys founded the Laboratory of Physiological Hygiene at the University of Minnesota under the University's Memorial Stadium. His laboratory was the precursor to the School of Public Health's division of Epidemiology, and it soon became a mecca for research and training in the new field that combined physiology, nutrition, epidemiology, and prevention research.

During WWII, Keys worked with the army to develop rations for combat troops, named the “K-ration” after Keys. At the end of the war, he also led research into starvation that helped guide the rehabilitation of people who were starved during the war.

Keys retired from the University in 1972 after 36 years of service.

Keys is survived by his wife, Margaret, son Henry, and daughter Carrie d'Andrea. A memorial service for Dr. Keys will be held at 11 a.m. Dec. 4, at Washburn-McCreavy Funeral Home, in Edina.

## UNIVERSITY OF MINNESOTA

*Twin Cities Campus**Academic Health Center**Office of the Senior Vice President  
for Health Science**Mayo Mail Code 501**420 Delaware Street S.E.  
Minneapolis, MN 55455-0374**612-626-3700**Fax: 612-626-2111**Offices located at:**410 ChRC**426 Church Street S.E.**Minneapolis, MN 55455-0374***CORRECTION: Ancel Keys passed away Sat., Nov. 20****NEWS RELEASE****For immediate release****Contact:** Sara Buss, Academic Health Center, 612-624-2449  
Jonell Rusinko, Academic Health Center, 612-624-5680**PUBLIC HEALTH PIONEER ANCEL KEYS PASSES AWAY**  
**Keys was leading researcher in cholesterol and heart disease**

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"For the School of Public Health, his long career has been the model of excellence and world-wide impact on human life and progress that we dream of, believe in, and strive for," said John Finnegan, dean of the School of Public Health. "It has been said that we stand on the shoulders of giants. Ancel Keys was truly an intellect of that stature."

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Academic Health CenterMayo Mail Code 735  
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A395 Mayo Memorial Building  
612-624-5100  
Fax: 612-625-2129**NEWS RELEASE****For Immediate Release****Contact:** Jonell Rusinko, Academic Health Center, 612.624.5680/pager 612.899.7471  
Sara Buss, Academic Health Center, 612.624.2449**LOW-GLYCEMIC LOAD DIET MAY IMPROVE ABILITY TO STAY ON DIET LONGER****University of Minnesota Researcher Also Finds the Diet May Improve  
Cardiovascular Risk Factors**

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Pereira and colleagues at Harvard University designed a randomized parallel-design study of 39 over-weight or obese young adults aged 21 to 40 years who received an energy-restricted diet, either low-glycemic load or low-fat. Participants' body composition, REE, blood cholesterol, blood pressure and blood glucose and insulin levels were measured and studied before and after 10 percent weight loss.



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**NEWS RELEASE**

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**Contact:** Mary Pattock, School of Nursing, 612-624-0939  
Sara Buss, Academic Health Center, 612-624-2449**U OF M NURSE RESEARCHERS STUDY COSTLY AND  
UNDER-TREATED INCONTINENCE PROBLEM  
NURSING RESEARCH PUBLISHES REPORT IN JOURNAL SUPPLEMENT**

MINNEAPOLIS / ST. PAUL (Nov. 29, 2004)—Incontinence affects millions of Americans, but often goes untreated because it is embarrassing for the patient and poorly understood, even among health providers. A synthesis of research on the topic, *Shaping Future Directions for Incontinence Research*, will appear November 2004 in the first-ever supplement to the highly respected journal *Nursing Research*. Published by Lippincott Williams & Wilkins, it reports on an international invitational summit convened in October 2003 by the Center for Gerontological Nursing at the University of Minnesota School of Nursing as part of the John A. Hartford Foundation Geriatric Nursing Initiative Program.

The University's research was highlighted at the 57<sup>th</sup> Annual Scientific Meeting of the Gerontological Society of America, held earlier this month in Washington, D.C.

The supplement synthesizes the efforts of nurse researchers and others who study and manage this widespread health condition and is a resource for guiding future research in urinary incontinence (UI) and fecal incontinence (FI). *Nursing Research* published the supplement "as a way of stepping back from specific, defined research and carefully examining a body of knowledge to re-energize a defined area of research," according to Molly C. Dougherty, Ph.D., APRN, *Nursing Research* editor and professor of nursing at the University of North Carolina at Chapel Hill.

The summit brought together 47 researchers, project officers, clinician leaders, doctoral students, and advocates from the United States, Canada, United Kingdom, Japan, Norway, and Australia. Many were nurse researchers who study incontinence but do not otherwise have the

—more—

*Incontinence research, page 2*

opportunity to discuss incontinence with each other because their expertise is in varying sub-specialties.

**Unmentioned, under-treated, costly ... and it affects millions**

Urinary incontinence affects at least 17 million Americans, including 28 percent of those older than 60 and 15 percent of those younger. Fecal incontinence affects 5.5 to 17 million adults; approximately 10 percent over 64 are likely to be affected. Incontinence restricts normal daily activity and contributes to anxiety, depression, and poor quality of life. Sufferers may confine themselves to their homes and avoid social contact. To avoid accidents, some risk dehydration by limiting fluid intake – people with FI have even been known to starve themselves. The condition creates a difficult burden for millions of family members and other caregivers, and is an important factor in decision-making regarding nursing home placement.

The condition also takes a significant financial toll. The annual cost of UI in the elderly alone was recently estimated to be \$19.5 billion, plus an additional \$6 billion to family caregivers of non-institutionalized elders. Costs associated with FI are not available, but assumed to be substantial. As larger numbers of adults reach old age, the prevalence, consequences, and costs of incontinence are expected to rise significantly.

The University's Jean F. Wyman, Ph.D., R.N., FAAN, co-editor of the report, says the need for research on incontinence management among frail elders is particularly great. She says this group is often forgotten as scientists focus on the needs of younger, more ambulatory incontinence patients whose incontinence may be cured.

**Available in hard copy and online**

Articles in *Shaping Future Directions for Incontinence Research* address behavior change theories applied to incontinence; population-based strategies for prevention; patient-centered interventions; research on incontinence among frail elders; urinary incontinence in men; fecal incontinence; the use of technology, devices, and products to manage incontinence; and translational research. Editors Wyman, and Donna Z. Bliss, Ph.D., R.N., FAAN, are professors at the University of Minnesota School of Nursing. Wyman is the director of its Center for Gerontological Nursing.

The supplement will be distributed to more than 10,000 researchers and clinicians from

—more—

*Incontinence research, page 3*

many disciplines who serve the elderly. Nurses will be particularly interested in the research-based approaches to care discussed in this publication, since they are major care providers for aging adults and have a key role in preventing, detecting, assessing, and managing incontinence.

Copies are available from Jan Marie Lundgren (lundg026@umn.edu), and online at [NursingCenter.com](http://NursingCenter.com).

*Nursing Research is a bi-monthly journal published by Lippincott Williams & Wilkins (LWW), a leading publisher for physicians, nurses, specialized clinicians and students. LWW provides essential information for health-care professionals in print and electronic formats, including textbooks, journals, CD-ROM, via Intranets and the Internet. Lippincott Williams & Wilkins is part of Wolters Kluwer Health, a leading information provider for professionals and students in medicine, nursing, pharmacy, science, and related areas. WK Health is a division of Wolters Kluwer, NV, a multinational publisher and information services company with annual revenues (2003) of \$3.4 billion, and 18,750 employees worldwide.*

*The University of Minnesota School of Nursing is ranked among the nation's top nursing schools. It is a leader in nursing research and has a combined undergraduate and graduate enrollment of approximately 850 students. The school produces 55 percent of the faculty in Minnesota's public and private nursing schools, advanced practice nurses, and nurses who can assume leadership positions. It is the oldest continuing university-based school of nursing. The School of Nursing is one of seven schools and colleges in the Academic Health Center, one of the most comprehensive facilities for health professionals in the nation, fostering interdisciplinary study, research, and education.*

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## MEDIA ADVISORY

**Contacts:** Jonell Rusinko, Academic Health Center, 612.624.5680  
Molly Portz, Academic Health Center, 612.625.2640**U OF M SPONSORS SEMINAR TO EXAMINE BHOPAL 20 YEARS LATER**  
*Health Effects on the Second Generation Presented***WHAT:** The University of Minnesota School of Public Health is sponsoring a seminar focusing on health effects facing the second generation of Bhopal survivors. Elizabeth Guilette, Ph.D., Department of Anthropology, University of Florida, will present information about the health effects on Friday at 3:00 p.m. and will also conduct a roundtable discussion focusing on performing containment research in developing countries from 10:00-11:30 in 1155 Mayo.

On the night of December 2nd and 3rd, 1984, a Union Carbide plant in Bhopal, India, began leaking 27 tons of the deadly gas methyl isocyanate. Half a million people were exposed to the gas and 20,000 have died to date as a result of their exposure. Dr. Guilette has recently completed an examination of the physical, mental, and social problems of children of the survivors.

**WHERE:** Moos Tower (2-530)  
University of Minnesota  
515 Delaware Street, S.E.  
Minneapolis, MN 55455**WHEN:** Friday, December 3, 2004  
3 p.m.**WHO:** Elizabeth Guilette, Ph.D.  
Department of Anthropology  
University of FloridaTo register, please email [kbuxton@umn.edu](mailto:kbuxton@umn.edu). The event is free and open to the public.

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## NEWS RELEASE

For immediate release

**Contact:** Rebecca Lentz, College of Pharmacy, 612.624.7654  
Molly Portz, Academic Health Center, 612.625.2640

### **U OF M COLLEGE OF PHARMACY ANNOUNCES WEAVER MEDAL RECIPIENT *Henry J. Mann named recipient of annual award***

MINNEAPOLIS / ST. PAUL (Dec. 6, 2004) — The University of Minnesota College of Pharmacy will award the Lawrence C. and Delores M. Weaver Medal to Henry J. Mann, Pharm.D.

Mann, a professor in the Department of Clinical and Experimental Pharmacy at the college, serves as director of the Center for Excellence in Critical Care.

Since 1996, the University of Minnesota College of Pharmacy has annually awarded the Lawrence C. and Delores M. Weaver Medal for distinguished contributions to the College of Pharmacy in the areas of pharmacy education, research, and/or outreach. The award selection committee includes University and college faculty as well as representatives from the state's pharmacy professional organizations.

The college will hold an award ceremony and reception Dec. 16, 2004.

"Dr. Mann is a most deserving recipient of the award. He laid the groundwork for the very successful non-traditional Doctor of Pharmacy degree and our outstanding outreach education effort," said Marilyn K. Speedie, Ph.D., dean of the College of Pharmacy. "He helped build relationships with alumni and other pharmacists in the state. In addition he has built the exciting and successful Center of Excellence for Critical Care. We are very fortunate to have him on our faculty."

Mann, who holds a B.S. and a Pharm.D. from the University of Kentucky where he also completed an ASHP Residency, focuses his research on how critical illness affects the way the body handles drugs and how it then reacts to drug therapy.

"I am very appreciative of being selected for this award because it is linked to Larry and Dee Weaver, whose lives have reflected service and caring for both individuals and ideals,"

—more—

*Weaver medal, page 2*

Mann said. "I am grateful for the opportunities the University has provided me and pleased that I have been able to give back something perceived as valuable to the College of Pharmacy."

Mann previously received the University's Technology Enhanced Learning Award, the Pharmacy Alumni Society Faculty Recognition Award, and the American Society of Health-System Pharmacists Research Award. He was also a CIC Academic Leadership Program Fellow and is a fellow of the American Society of Health-System Pharmacists, the American College of Clinical Pharmacy, and the American College of Critical Care Medicine.

Mann served as associate department head for the Department of Pharmacy Practice and was associate dean for professional and external relations.

*The College of Pharmacy, the only school of pharmacy in Minnesota, offers its program on the Twin Cities and Duluth campuses. Founded in 1892, the College of Pharmacy educates pharmacists and scientists and engages in research and practice to improve the health of the people of Minnesota and society. The college is part of the Academic Health Center, which is home to the University of Minnesota's six health professional schools and colleges as well as several health-related centers and institutes.*

—end—

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Office of Communications  
Academic Health CenterMayo Mail Code 735  
420 Delaware Street S.E.  
Minneapolis, MN 55455**NEWS RELEASE****Embargo until: 1 p.m. (C.T.) Thursday, Dec. 9, 2004**Office:  
A395 Mayo Memorial Building  
612-624-5100  
Fax: 612-625-2120**Contact:** Jonell Rusinko, Academic Health Center, 612.624.5680  
Sara Buss, Academic Health Center, 612.624.2449**U of M Research Explores Addiction as a Computational Process**  
*Model Allows Addiction Theories to be Tested*

MINNEAPOLIS/ST.PAUL (December 9, 2004) – A University of Minnesota researcher developed a computational model of addiction which can be used to make predictions about human behavior, animal behavior, and neurophysiology. By bringing addiction theory into a computational realm, researchers will be able to ask and answer key questions to gain valuable insight into addictive behavior. The model was developed based on two hypotheses: that dopamine serves as a reward-error learning signal to produce temporal-difference learning in the normal brain, and that cocaine produces an increase in dopamine directly in phases. The research will be published in the December 10 issue of *Science*.

Addiction is likely to be a complex process arising from transitions between learning algorithms. Because this model has key variables and values in place, researchers can test a variety of questions regarding addictive behaviors to better understand factors of addiction.

“Different theories about addictions have existed for a long time, but had not yet been connected with learning and memory,” said David Redish, Ph. D., Department of Neuroscience, University of Minnesota. “By connecting addiction research with learning and memory research, we are able to use learning and memory models to test and predict a variety of addictive behaviors and signals.”

Addictive drugs have been hypothesized to access the same neurophysiological mechanisms as natural learning systems. These systems can be modeled through temporal-difference reinforcement learning (TDRL), which requires a reward-error signal thought to be carried by dopamine. Natural increases in dopamine occur after unexpected natural rewards; however, with learning these increases shift from the time of reward delivery to cueing stimuli. In TDRL, once the value function predicts the reward, learning stops. Cocaine and other addictive drugs, however, produce a momentary increase in dopamine through



neuropharmacological mechanisms, thereby continuing to drive learning, forcing the brain to over-select choices which lead to getting drugs.

This computational model of addiction connects a variety of disparate learning theories and will allow researches to test how addiction impacts learning systems.

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## UNIVERSITY OF MINNESOTA

Twin Cities Campus

Office of Communications  
Academic Health CenterMayo Mail Code 735  
420 Delaware Street S.E.  
Minneapolis, MN 55455**NEWS RELEASE**

For immediate release

Office:  
A395 Mayo Memorial Building  
612-624-5100  
Fax: 612-625-2129**Contact:** Jonell Rusinko, Academic Health Center, 612.624.5680  
Sara Buss, Academic Health Center, 612.624.2449**U of M Research Explores Addiction as a Computational Process**  
*Model Allows Addiction Theories to be Tested*

MINNEAPOLIS/ST.PAUL (December 9, 2004) – A University of Minnesota researcher developed a computational model of addiction which can be used to make predictions about human behavior, animal behavior, and neurophysiology. By bringing addiction theory into a computational realm, researchers will be able to ask and answer key questions to gain valuable insight into addictive behavior. The model was developed based on two hypotheses: that dopamine serves as a reward-error learning signal to produce temporal-difference learning in the normal brain, and that cocaine produces an increase in dopamine directly in phases. The research will be published in the December 10 issue of *Science*.

Addiction is likely to be a complex process arising from transitions between learning algorithms. Because this model has key variables and values in place, researchers can test a variety of questions regarding addictive behaviors to better understand factors of addiction.

“Different theories about addictions have existed for a long time, but had not yet been connected with learning and memory,” said David Redish, Ph. D., Department of Neuroscience, University of Minnesota. “By connecting addiction research with learning and memory research, we are able to use learning and memory models to test and predict a variety of addictive behaviors and signals.”

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**U OF M RESEARCHERS FIND DISPARITIES IN HOW  
STATES COVER UNINSURED CHILDREN**

***Analysis shows program meant to equalize doesn't always get the job done***

MINNEAPOLIS / ST. PAUL (Dec. 9, 2004)— Despite the nationwide decrease in the number of uninsured children, University of Minnesota research shows that for children in some states, access to health insurance is still a problem.

In 1997, when the State Children's Health Insurance Program (SCHIP) passed, politicians lauded it as an equalizer that would ensure children had access to health care. And in some cases, it worked. Uninsurance rates for children in states including Vermont, Rhode Island, and Wisconsin range from lows of four to five percent. However, children with similar socioeconomic backgrounds in states like Arizona and Texas fare much worse, with uninsurance rates between 19 and 22 percent.

The University's State Health Access Data Assistance Center (SHADAC) published their research in the November/December issue of *Health Affairs*. Professors Lynn Blewett and Michael Davern found that between the pre- and post-SCHIP time periods (1996-1998 and 2001-2002), for example, only 27 of the 51 states and the District of Columbia had significant declines in the percent of uninsured children after controlling for individual socio-demographic, employment, and other characteristics. Twenty-nine states saw significant increases in the percent of children enrolled in public health care programs, while only five states saw a significant increase in the percent of children with private health insurance coverage.

"The bottom line is that despite the largest public investment in health insurance coverage since the 1960s, two children with very similar life situations may have

—more—

*Uninsured children, page 2*

dramatically different access to health insurance coverage, simply by virtue of what state they call home," Blewett said.

Blewett and Davern conclude that a bipartisan effort is needed to work toward equitable distribution of coverage for all of the nation's low-income children, either through higher federally mandated minimum eligibility levels, new state and federal financial support, or other innovations that get and keep children enrolled.

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## NEWS RELEASE

Embargoed until 6:30 p.m. EST, Dec. 30, 2004

**Contact:** Jonell Rusinko, University of Minnesota, 612.624.5680  
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### **15-YEAR STUDY FIRST TO SHOW STRONG CORRELATION BETWEEN FAST FOOD, WEIGHT GAIN, AND INSULIN RESISTANCE**

MINNEAPOLIS/ST. PAULI. (December 30, 2004) – Researchers have shown a correlation between fast food, weight gain, and insulin resistance in what appears to be the first long-term study on this subject. The Coronary Artery Risk Development in Young Adults (CARDIA) study by Mark Pereira, Ph.D., assistant professor in epidemiology, University of Minnesota School of Public Health, and David Ludwig, M.D., Ph.D., director of the Obesity Program at Children's Hospital Boston, reported that fast food increases the risk of obesity and type 2 diabetes. The results of this 15-year study will be published in the Jan. 1 issue of *The Lancet*.

Participants who consumed fast food two or more times a week gained approximately 10 more pounds and had twice as great increase in insulin resistance in the 15-year period than participants who consumed fast food less than once per week.

"Fast-food consumption has increased in the United States during the past three decades," said Pereira. "While there have been many discussions about fast-food's effects on obesity, this appears to be the first scientific, comprehensive long-term study to show a strong connection between fast-food consumption, obesity, and risk for type 2 diabetes."

"The CARDIA study factored in and monitored lifestyle factors including television viewing, physical activity, alcohol consumption, and smoking, but determined that increase in body weight and insulin resistance from fast-food intake seemed to be largely independent of these other lifestyle factors," said Ludwig.

Fast-food frequency was lowest for white women (about 1.3 times per week) compared with the other ethnic and gender groups (about twice a week). Frequency was higher in African-Americans than in whites and in men than in women for every examination year. Age-adjusted fast-food frequency was relatively stable over time among African-Americans but fell in those who were white.

This study of cardiovascular disease risk factor evolution included 3,031 young (age 18-30 years in 1985) African-American and white adults whose frequency of fast-food visits, changes in body weight and insulin resistance were monitored and measured for 15 years. This was a multi-center, population-based study with study centers in Birmingham, Ala., Chicago, Ill., Minneapolis, Minn., and Oakland, Calif.

The study was funded by the National Heart Lung and Blood Institute (NHLBI), the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), and the Charles H. Hood Foundation.

**NOTE:** To request an electronic PDF version of *The Lancet* article, please contact one of the media contacts listed above.

**TELEVISION PRODUCERS:**

The University of Minnesota has **b-roll footage** related to these findings. Please note the following feed schedule:

FEED DATE: Thursday, December 30, 2004  
FEED TIME: 8:00 – 8:15 p.m.  
COORDINATES: C Band: IA (formerly Telstar) 6 (C)/Transponder 15/Audio 6.2 & 6.8

RE-FEED DATE: Saturday, January 1, 2005  
RE-FEED TIME: 11:00 – 11:15 a.m.  
COORDINATES: C Band: IA (formerly Telstar) 6 (C)/Transponder 15/Audio 6.2 & 6.8

For general questions regarding the b-roll, please contact Diana Harvey at (612) 625-7134 or (612) 845-6263. For any technical issues related to the feed, Medialink should be contacted directly at (212) 682-8300.

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*Children's Hospital Boston is the nation's leading pediatric medical center, the largest provider of health care to Massachusetts' children, and the primary pediatric teaching hospital of Harvard Medical School. Children's provides pediatric and adolescent health services for patients from birth through age 21. In addition to 325 inpatient beds and comprehensive outpatient programs, it houses the world's largest research enterprise based at a pediatric medical center. More than 500 scientists, including eight members of the National Academy of Sciences, nine members of the Institute of Medicine and 10 members of the Howard Hughes Medical Institute comprise Children's research community. For more information about the hospital visit: [www.childrenshospital.org](http://www.childrenshospital.org).*

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