

Events to Know

August

9 Freshman Orientation and White Coat Ceremony. Contact the Office of Student Affairs at 713.500.5160.

11-12 Freshman Retreat. Camp Allen. Contact the Office of Student Affairs at 713.500.5160.

14 First day of class.

UTMost Interest

Dr. Barry Kahan, professor of surgery and division director of immunology and organ transplantation, presented "Infrastructure for Studies in Human Beings: The Ten C's: 25 Years of Adventures and Misadventures," at the American Society of Transplant Surgeons 6th Annual State of the Art Winter Symposium in Scottsdale, Ariz. He also presented "Calcineurin Inhibitors: Avoidance, Withdrawal, Minimization," at the Australia and New Zealand Transplant Summit in Queensland, Australia. In addition, **Michael Leavitt**, the secretary of health and human services, recognized Kahan this year for his service on the Advisory Committee on Organ Transplantation.

Dr. Stephen Chris Pappas, visiting professor of internal medicine, recently presented "New Tricks for an Old Dog: New Therapies and Drug Development for Viral Hepatitis," as part of the monthly Liver Disease and Liver Transplantation Lecture Series. Pappas is currently a member of St. Luke's Center for Liver Disease.

Dr. Anna Steinberger, professor emeritus of obstetrics, gynecology and reproductive sciences, received the Women in Endocrinology Mentoring Award from the Endocrine Society. The award was presented at the society's June annual meeting in Boston.

Dr. C. S. Raman, assistant professor of biochemistry and molecular biology, was the keynote speaker at the 5th SW P450 Meeting from May 8-10 at Camp Allen. His talk was titled "Structural mechanism for Prostaglandin Biosynthesis."

New \$11.6 million grant to start aortic diseases center

Dr. Dianna Milewicz, professor and director of the Division of Medical Genetics, will use a new, \$11.6 million grant to take the next step in her quest to prevent premature deaths from a stealthy disease that kills people in the prime of their lives.

The five-year grant from the National Heart, Lung and Blood Institute will create the Specialized Center for Clinically Oriented Research in Thoracic Aortic Aneurysms and Dissections, to be located in the Texas Medical Center.

Milewicz, the President George H. W. Bush Chair in Cardiovascular Medicine, is lead investigator and director of the multi-institutional center.

"This is a first step toward understanding the disease process leading to aortic aneurysms and dissections, so we can go after better biomarkers, better imaging, and better ways to predict outcomes," said Milewicz, who has extensively researched the genetic basis of thoracic aortic aneurysms and dissections. "The ultimate goal of the grant is to prevent premature deaths due to aortic dissection or rupture and hopefully lead to new therapies to treat the disease."

Other participating institutions are Baylor College of Medicine and The University of Texas Medical Branch at Galveston (UTMB). Along with the UT Medical School, major sites for patient recruitment and research are Memorial Hermann Hospital-Texas Medical Center, the Texas Heart Institute at St. Luke's Episcopal Hospital, and Texas Children's Hospital.

Co-directors of the center are **Dr. Hazim Safi**, professor and chair of the Department of Cardiothoracic and Vascular Surgery, and **Dr. Joseph Coselli**, professor and chief of the Division of Cardiothoracic Surgery at Baylor.



Dr. Dianna Milewicz

(Cont'd. on back)

McNiece wins award for school hypertension program

With the rising rate of childhood obesity, it is becoming more common for children and adolescents to have high blood pressure, and the long-term effects from it can lead to greater health problems as adults.

Dr. Karen McNiece, a new clinical pediatric faculty member in the Division of Pediatric Nephrology and Hypertension, wants to know why young people get high blood pressure and the most effective ways to prevent it. Her study, "Prevalence of the Stages of Hypertension in Adolescents," is a step in the right direction and garnered her the American Society of Pediatric Nephrology Trainee Award for Clinical Research at the recent Pediatric Academic Societies Annual Meeting in San Francisco.

McNiece, a recipient of the Ruth L. Kirschstein National Research Service Award (NRSA) Individual Fellowship from the National Institutes of Health, completed her study as a fellow at the Medical School. It was motivated by findings from a working group of the National Heart, Lung, and Blood Institute's National High Blood Pressure Education Program, which published recommendations in 2004 on how to classify children with high blood pressure.

"The recommendations were made to mirror the adult recommendations and included a pre-hypertensive category and stages for high blood pressure," McNiece said, adding that staging high blood pressure in children had never been done.

According to the guidelines, children should be identified as pre-hypertensive, Stage 1 hypertensive, or Stage 2 hypertensive. McNiece focused her screening study on the prevalence of these stages among Houston adolescents with participants from nine area schools during 2003-2005.

"We went to junior high and high school physical education classes and measured height, weight, and blood pressure, which allowed us to look at how frequent those various stages are,"

(Cont'd. on back)



Dr. Karen McNiece



Open House set Aug. 2 for UCRC's new facility

The University Clinical Research Center (UCRC) and the Memorial Hermann Center for Clinical Innovation and Research are having an open house in their new joined facility from 5 p.m.-6 p.m. Aug. 2 on the third floor of the Robertson Pavilion at Memorial Hermann Hospital.

Tours of the facility will showcase the UCRC's four newly renovated inpatient rooms, as well as the expanded outpatient and processing laboratory space. Scientific highlights from investigators also will be displayed.

Come and see the significant advances made possible through UCRC support! Contact **Joy Lilljedahl**, administrative manager of the UCRC, at 713.704.4269 with questions.

The UCRC is administered by the Medical School, funded through a grant from the National Institutes of Health, and directed by **Dr. Pablo Okhuysen**, professor of internal medicine in the Division of Infectious Diseases.

McNiece award, cont'd.

McNiece explained. "We re-measured any student with an elevated blood pressure on a different day up to three times because in order to be diagnosed with high blood pressure, your blood pressure must be elevated on three separate occasions."

Her study included 6,790 male and female students, ages 11-17, with an average age of 12 ½ years. Her findings showed that 15.7 percent of students were pre-hypertensive, 2.4 percent were Stage 1 hypertensive, and .8 percent were Stage 2 hypertensive.

Dr. Karen McNiece's presentation was one of eight made by the Division of Pediatric Nephrology and Hypertension at the 2006 Pediatric Academic Societies Annual Meeting, including a presentation by **Dr. Scott Wenderfer**. Wenderfer, who was funded as a fellow through the Ruth L. Kirschstein NRSA Training Grant, presented his study on the role of C3a receptors in experimental glomerulonephritis. He also joined the pediatric faculty in July.

"Approximately 16 percent of the population is at-risk for developing hypertension and its complications in the future," McNiece explained.

Because 3.2 percent of screened adolescents had hypertension, the treatment recommendations for those with Stage 1 include lifestyle changes through diet and exercise. For adolescents with Stage 2, treatment with medication is recommended, in addition to lifestyle changes.

"Ultimately, what's important to me is to be able to understand why children develop high blood pressure and the most effective ways to treat it and prevent early associated complications," McNiece said. "I tell my kids that if they're going to have a heart attack or kidney failure, I want them to have it when they're 105, not when they're 35."

-C. Webb

Milewicz grant, cont'd.

"This award represents an opportunity for us to link decades of surgical research and management to basic sciences that addresses the fundamental biology of aortic disease," Safi said. "An NIH-funded effort of this scope is unprecedented in this area of research, and we hold great hope that new findings will lead to rapid development of new therapies."

"This critically important work effectively builds upon the leadership role the Texas Medical Center has taken in the successful surgical management of aortic pathology, aneurysms, and dissection," Coselli said. "Research programs are focused on the genetics of aortic disease, and the imaging and management of patients with known problems or familial proclivity. They will allow for earlier diagnosis as well as significantly improved management thus reducing morbidity and mortality. Ultimately genetic pathways hopefully make prevention entirely possible."

The aorta is the main blood vessel leading out of the heart. It supplies blood to the rest of the body. Some people develop a progressive degeneration of the aortic wall, leading to a bulging aneurysm, or to a dissection (a tear in the wall). Thoracic aneurysms tend to be without symptoms until a catastrophic dissection or rupture occurs.

"We don't know the pathology of the aortic wall degeneration," Milewicz said. "Understanding the pathological process is crucial in order to develop new therapies and diagnostic tools for the disease. The proposed projects in the grant work toward those goals."

Thoracic aortic disease is the 15th leading cause of death in the United States, killing up to 20,000 people a year. Emergency room doctors unfamiliar with its symptoms sometimes mistake a dissection as a flu virus or muscle pains. Once the aorta begins to dissect, patients may have anywhere from minutes to hours before it ruptures. Even if properly diagnosed, emergency surgery to repair the dissection is risky.

But if caught early enough, when an aneurysm is five centimeters or less, a surgical procedure to replace the diseased portion with a Dacron graft has a high degree of success.

"The Texas Medical Center has a long history of expertise in surgical repair of aneurysms and dissections of the aorta. Drs. DeBakey (**Michael E. DeBakey, M.D.**) and Cooley (**Denton Cooley, M.D.**) pioneered successful surgical repair in the late '50s," Milewicz said. "This grant builds on long-standing surgical expertise in the TMC and establishes Houston as a national center of expertise in aortic disease research."

Researchers including Milewicz have identified some of the defective genes that cause the inherited form of the disease, which affects 20 percent of people with aneurysms and dissections. Through DNA testing on family members, early identification of those at risk has led to diagnostic imaging and ultimately to saving lives.

"We've come a long way. We've identified and mapped genes over the years and have a very well-established research program looking at the genetic basis for this disease. In addition, we have begun to understand how you use that information to manage the disease," Milewicz said. "We want to take it one step further and discover the biological pathways to this disease, whether it's people who carry mutated genes or those who don't but still end up with this disease."

-D. Mann Lake

Doctors Orchestra holds auditions for next season

Doctors Orchestra of Houston is currently accepting new members, and auditions for the upcoming season will be held in mid-August. To apply, visit www.DoctorsOrchestraHouston.org. The orchestra will resume rehearsals in September.