



DEAN'S MESSAGE: What's On My Mind

What's on my mind this month is the importance of keeping our patients within the University of Maryland family by providing them with excellent care and exemplary customer service.

University of Maryland physicians and staff have committed themselves to creating a culture of service excellence to ensure the delivery of high quality, exceptional, compassionate care to each and every one of our patients. Government payers and health plans place a high premium on patient satisfaction as a measure of quality. We must do all we can to maximize patient satisfaction and loyalty.

Our faculty practices, University Physicians (UPI), have been working together to ensure that our high quality health care services are delivered in a service-focused environment. This process is called the "UPI Way." This initiative is comprised of several components, including supervisor and employee

"The "UPI Way" initiative is comprised of several components, including supervisor and employee training, accountability training, a patient satisfaction survey process, online performance monitoring, and a rewards and recognition program."

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Our staff and physicians are dedicated to embodying the SPIRIT of the "UPI Way"—

Service: We anticipate the needs and exceed the expectations of our patients and those we serve.

Professionalism: We accept individual responsibility for conducting ourselves in an honest and ethical manner.

Innovation: We take the initiative to explore creative ways to improve the quality of care for our patients and those we serve.

Respect: We value individual and cultural differences by showing our care and concern for all.

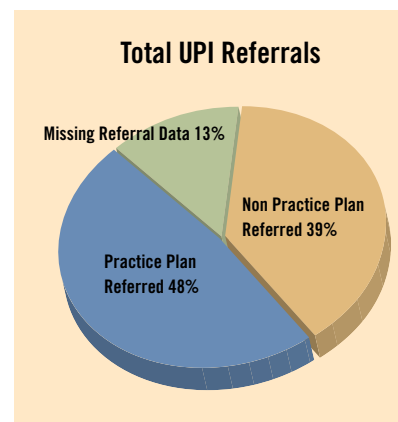
Integrity: We base our actions and interactions with patients and those we serve on our values, standards and behaviors.

Teamwork: We help each other to better serve our patients.

Helping each other serve our patients better means many things, including connecting our patients to the specialty care that they need. One of the benefits of being

part of a cohesive multi-specialty group is our familiarity with one another and the interrelated workings of some of the world's greatest physicians. Whenever possible, we need to refer patients to our own colleagues. This requires the attention of all of us. Faculty physicians need to look first to their associates in the practice plan when making a referral or seeking a consultation, and all of us need to make ourselves available to accommodate these internal referrals.

Of all our clinical services referrals, 48 percent are currently the result of referrals from one faculty physician to another.



While this is excellent, we are all aware of situations where a patient has been referred outside our group because we cannot consistently provide timely patient access. I want to see this change.

It is also essential that we improve patient access for community physicians who refer to us. We must strive to make our clinical services more available to both our faculty colleagues

as well as community physicians. Key to our relationship with referring physicians is communication. We must keep referring physicians apprised of our findings regarding their patients. Expanding access, showing flexibility in accommodating patients referred to us, and building strong relationships through timely communication with referring physi-

cians are absolutely essential to our success.

In the relentless pursuit of excellence, I am
Sincerely yours,

E. Albert Reece, MD, PhD, MBA
Vice President for Medical Affairs, University of Maryland
John Z. and Akiko K. Bowers Distinguished Professor
Dean, University of Maryland School of Medicine

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Special Events Honor Robert C. Gallo, MD, for His Historic Contributions in Helping Patients Afflicted with HIV & AIDS

May 4, 2009, was the 25th anniversary of Dr. Robert Gallo's *Science* magazine publication identifying HIV as the cause of AIDS, widely recognized as one of the most important scientific discoveries in history. Robert C. Gallo, MD, professor, Department of Medicine, and director, Institute of Human Virology (IHV), and his colleagues proved HIV is the cause of AIDS by isolating and cultivating the retrovirus from many patients with AIDS. Dr. Gallo also led the team that developed the blood test for AIDS, saving countless lives by preventing new infections. The blood test (for antibodies to HIV) was another important component that linked HIV to AIDS.

To commemorate Dr. Gallo's historic discoveries, the University of Maryland School of Medicine held a special scientific symposium and gala last month in Baltimore. Dr. Gallo's discovery is shared with French researcher Luc Montagnier, who came to Baltimore for the celebration. 🏛️



Colleagues, friends and dignitaries from around the world attended the gala "Celebrating a Visionary's Quest for Discovery: An Evening Honoring Robert C. Gallo, MD." Among the guests were former Maryland Lt. Governor Kathleen Kennedy Townsend (center), chair of the IHV board, and Maryland Delegate Shirley Nathan-Pulliam.



Symposium opening remarks were made by Bernadine Healy, MD, currently of *US News and World Report*, and the former director of the National Institutes of Health.



Dave Wilkins, COO, Institute of Human Virology, presents Robert Gallo, MD, (left) with a display of the *Science* magazine articles he published 25 years ago identifying the AIDS virus, which he named HTLV-III.



Hundreds of the world's leading scientists attended a three-day symposium entitled "25 Years After Discovering HIV as the Cause of AIDS." Co-hosted by the University of Maryland School of Medicine and the National Cancer Institute, the symposium examined the origins of research on human retroviruses and the strategies to overcome the obstacles to treatment and prevention.



Attending the symposium and the gala was AIDS co-discoverer Luc Montagnier, president of the World Foundation for Medical Research and Prevention.

Institute for Genome Sciences Receives \$20 Million to Create Genome Sequencing Center for Infectious Diseases

The Institute for Genome Sciences has been awarded \$20 million from the National Institute for Allergy and Infectious Diseases (NIAID) to create a Genomic Sequencing Center for Infectious Diseases. The contract, the largest the Institute for Genome Sciences (IGS) has earned since its founding two years ago, makes IGS a national hub for genetic information on infectious disease. It also opens the door for collaborations with other School of Medicine investigators who study infectious diseases. The institute will use the funding to sequence and analyze the genomes of infectious organisms, including agents of bioterrorism and new or emerging diseases. Emerging diseases are defined as infections that cause a sudden outbreak, such as the swine flu, SARS or the spate of *E. coli*-related foodborne illnesses that occurred last year. The genetic information can be used to develop new diagnostic and treatment tools to fight infection.

The contract was one of three the National Institute for Allergy and Infectious Disease awarded to create Genomic Sequencing Centers for Infectious Diseases at just three centers in the US—the Institute for Genome Sciences at the University of Maryland School of Medicine, the Eli and Edith L. Broad Institute at the Massachusetts Institute of Technology and the J. Craig Venter Institute. The entire program totals \$106 million for five years. It makes IGS and the other two institutions the key resource centers for genomic information and analysis of infectious diseases in the United States.

“This project places the University of Maryland School of Medicine and IGS front and center in infectious disease research nationwide,” said Claire Fraser-Liggett, PhD, professor, Department of Medicine, and director of IGS.

The contract encourages collaboration between the IGS and other clinicians and scientists who have unusual or significant pathogen samples they would like to see sequenced and analyzed. Such scientists can propose projects to the IGS researchers and provide samples of the pathogens for sequencing. That means that if scientists in the Center for Vaccine Development identify a new strain of tropical disease, they can ask IGS researchers to sequence and analyze its DNA as part of the project. If NIAID approves a project

ences and the other distinguished scientists in our many top-tier centers of excellence such as the Center for Vaccine Development and the Institute for Human Virology,” said Dean E. Albert Reece, MD, PhD, MBA. “This is precisely the type of partnership we envisioned when we recruited Dr. Fraser-Liggett and her colleagues two years ago.”

“This agreement with NIAID will be a boon to all researchers at the University of Maryland School of Medicine,” said James B. Kaper, PhD, professor and chair, Department of Microbiology & Immunology. “My department has worked closely with the researchers at IGS since their recruitment.

We’re looking forward to new partnerships as part of the Genomic Sequencing Center for Infectious Diseases project.

Long distance scientific collaborations are one thing, but there is a special added advantage in being able to walk down the hall or across the street to find the expertise and resources you need.”

NIAID designed the program to allow research centers like the Institute for Genome Sciences to respond quickly and readily in the event of a bioterrorist attack or an infectious agent emergency. Ordinarily, in order to get federal funding for research,



James Kaper, PhD, and his colleagues in the Department of Microbiology & Immunology look forward to collaborating with Claire Fraser-Liggett, PhD, (right) and her colleagues at the Institute for Genome Sciences as they develop the new Genomic Sequencing Center for Infectious Diseases.

scientists must go through a lengthy application and approval process with the NIH that can take as long as a year. The Genomic Sequencing Centers for Infectious Diseases program is structured as a different kind of funding mechanism.

The streamlined process will allow scientists to respond in a matter of days or weeks. For example, if an outbreak of food borne illness occurs, IGS scientists can quickly apply and gain approval for a project to sequence and analyze the genome sequence of that foodborne illness. “With the help of the next-generation genomic sequencing equipment we have acquired at IGS, this contract will serve as a ready-made funding mechanism that could allow us to sequence as many as 500 to 600 DNA samples in five years,” said Dr. Fraser-Liggett. “We hope that by accelerating the process of sequencing and analyzing the DNA of these infectious diseases, we also can help speed scientists nationwide toward finding cures or vaccines for diseases that threaten lives in the US and the worldwide.”

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proposed by outside collaborators, the contract will facilitate that sequencing and analysis at the IGS, and create a library of such information for sharing with researchers throughout the country. In return for proposing projects and providing samples, the outside researchers will gain access to the genomic information the IGS scientists discover.

“This new contract will encourage partnership between the world-class researchers at the Institute for Genome Sci-

Scientists Discover Key Brain Mechanism to Central Pain Syndrome

Scientists at the School of Medicine have discovered a key mechanism in the brain related to a devastating pain condition affecting patients suffering from spinal cord injury, multiple sclerosis and stroke. The condition, called Central Pain Syndrome, causes chronic pain that patients compare to being stabbed with a thousand burning knives. The pain is so severe and untreatable that suicide is a leading cause of mortality among those it afflicts. A team of researchers has traced the syndrome to a malfunction in the zona incerta, or “zone of uncertainty,” an area of the brain about which little was known until now. The paper was published in the online version of the *Journal of Neurophysiology*.

“We hope that by understanding this underlying mechanism of Central Pain Syndrome, we can begin to think about potential treatments or preventive techniques,” said the study’s lead author Asaf Keller, PhD, professor, Department of Anatomy & Neurobiology.

Pain travels from the limbs to the spinal cord to the brain. The zona incerta reduces pain by filtering out or inhibiting sensory cues it deems unimportant before they pass on to the rest of the brain. The zona incerta allows only certain pain information to be experienced by the brain. The study, called “Zona Incerta: A Role in Central Pain,” traced Central Pain Syndrome back to a malfunctioning zona incerta. The scientists found that the zona incerta in animals with Central Pain Syndrome is not inhibiting pain as it should. The zona incerta in these animals is allowing too much pain information through to the rest of the brain, causing the animals to experience unusually high levels of pain.

Dr. Keller collaborated on the study with Scott M. Thompson, PhD, professor, Department of Physiology,



Asaf Keller, PhD



Scott M. Thompson, PhD

Radi Masri, PhD, assistant professor at the University of Maryland Dental School, Jessica Lucas, graduate student in the Program in Neuroscience, and Raimi Quiton, PhD, academic fellow, and Peter Murray, PhD, post-doctoral fellow, both from the Department of Anatomy & Neurobiology. The study was funded by the National Institute of Neurological Disorders and Stroke and the Christopher & Dana Reeve Foundation.

Central Pain Syndrome affects as many as 80 percent of patients with spinal cord injury, about 30 percent of multiple sclerosis patients and almost 10 percent of patients who have suffered a stroke. The pain associated with the syndrome can be a heightened sensitivity to ordinarily painless activities as simple as putting on clothes or experiencing the wind on the skin. The syndrome also causes spontaneous pain that occurs for no apparent reason and can be unrelenting. There is no treatment for the condition, and scientists have known little about the source of the pain until now.

Co-investigator Dr. Thompson recently completed a study with his associate Gexin Wang, PhD, post-doctor-

al fellow, Department of Physiology, showing that animals with Central Pain Syndrome respond to a drug called ethosuximide, a US Food and Drug Administration-approved treatment for childhood epilepsy. Dr. Thompson’s study found that ethosuximide appeared to calm the over-activity and excitability in the thalamus that seems related to Central Pain Syndrome. Some of that excessive activity may be a result of inactivity in the zona incerta, according to Dr. Keller’s and Dr. Thompson’s latest joint study. “Our two studies examine areas of the brain that are very near each other, very similar and clearly related. We believe our two studies are basically indicating the same thing—that there is some imbalance of activity in the thalamus.”

The scientists plan to continue their research to investigate new treatments and preventions for Central Pain Syndrome. Dr. Thompson will begin a study of ethosuximide in human patients very soon. Since that drug already has earned FDA approval for treating epilepsy, if it proves effective in Central Pain Syndrome it could be approved for treating that condition far more quickly than a new drug. Dr. Keller is planning to investigate other avenues as well. His study showed that, after an injury to the spinal cord, the zona incerta gradually stops working properly over a period of several weeks. Dr. Keller and his colleagues hope to find a way to intervene during those weeks and keep the zona incerta active. “We’re considering options such as non-invasive brain stimulation, stem cell implants or even occupational therapy—exercises patients could do to stimulate the zona incerta,” Dr. Keller said. “A successful treatment regimen one day could include a combination of exercises and drug therapy. We’re hopeful we’ll find relief for these patients, at last.”

Scarless, Single-Port Surgery Provides New Option for Kidney Donation

University of Maryland surgeons are the first in Maryland to perform a single-port, natural orifice kidney removal surgery through the navel for a living kidney donor. During the procedure, surgeons use a single opening in the navel, or belly button, as they manipulate a camera and two laparoscopic instruments to separate the kidney from its attachments in the abdomen. The kidney is then removed through that same opening. Only a tiny bandage is required to close the navel, and there are no scars.

"This is the next advance in organ donation and we are pleased to be able to offer this procedure to patients who are doing a very altruistic thing by donating a kidney. It is another way we can say thanks to the very special people who are organ donors. Most kidney donors would qualify



Rolf Barth, MD

for this new approach," said Rolf Barth, MD, assistant professor, Department of Surgery. Dr. Barth led the entire surgical team as they performed the single-incision kidney removal on April 15, 2009. The University of Maryland Medical Center is only the third hospital in the United States to perform this type of surgery.

Kristen McLoughlin, 22, of Madison Heights, Virginia, was the first kidney donor to undergo the single-port, kidney removal through the navel. Ms. McLoughlin has high praise for this advance.

"It's neat. I came out of surgery with just a Band-Aid. It's a breakthrough for future do-

nors and will make it easier for them," she remarked.

Laparoscopic removal of donor kidneys, which University of Maryland surgeons have performed since March 1996, has become the norm. That approach requires three or four tiny openings in the abdomen to insert a camera and instruments, and a four-inch incision to lift out the kidney.

However, the new procedure, called single-incision laparoscopic surgery, accomplishes everything through a single opening in the belly button. Single-incision laparoscopic kidney removal employs the same tools and techniques as conventional laparoscopic surgery and can




Ms. McLoughlin through a Web-based organ donor matching service, matchingdonors.com. Because of Ms. Jacobson's polycystic kidney disease, her enlarged, diseased kidneys had to be removed. The University of Maryland specializes in helping patients with Ms. Jacobson's condition by removing the diseased kidneys just before the transplant, in one operation.

Ms. McLoughlin says she began thinking about becoming an organ donor after her older sister was killed in a car accident more than three years ago. Some of her sister's

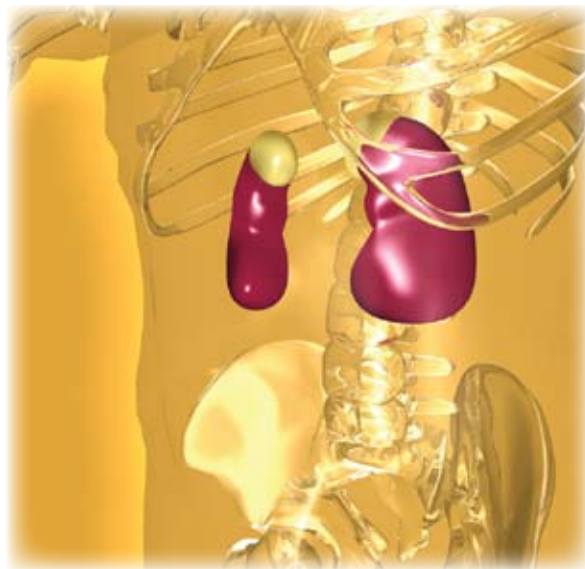
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organs were donated after her death, and that started Ms. McLoughlin thinking about the idea of organ donation. Ms. McLoughlin says that becoming an organ donor fits in with her work helping others that she's been involved in during the past year after graduating from college. She is co-chair of a domestic violence coalition and a victim services coordinator for the Crisis Line of Central Virginia, where she assists people who were victims of rape or sexual assault.

"The decision to use the single port technique is consistent with the research and educational philosophy at the University of Maryland School of Medicine, which nurtures the quest for innovative ways to improve patient care," said Dean E. Albert Reece, MD, PhD, MBA.

Dr. Barth says that for donors like Kristen McLoughlin, who have already decided to give the gift of life and are willing to go through surgery to help a person in need, the possibility of coming through the surgery without scars is a secondary benefit. 

Cynthia Jacobson (left) with her kidney donor Kristen McLoughlin.



Patient is First in US to Use New, Smaller Artificial Lung System

A 49-year-old Maryland man suffering from end-stage emphysema is believed to be the first person in the United States to be liberated from both a ventilator and traditional, cumbersome lung machine while waiting to receive a lung transplant. Doctors at the University of Maryland have adapted a small, portable artificial lung, using a newly approved catheter, so that the patient, Ward Forsyth, of Williamsport, Maryland, can walk, talk, eat and even exercise on a treadmill while he waits for new lungs.

Patients on a ventilator are usually thought to be too ill to be considered for a transplant. The physicians involved say this new portable artificial lung offers promise for patients such as Mr. Forsyth, improving their chances of having a successful surgery.

The portable device is a simplified version of an extracorporeal membrane oxygenation machine (ECMO), which employs a pump to circulate blood through an artificial lung and back to the bloodstream. It infuses the blood with oxygen and removes carbon dioxide, similar to healthy lungs. Previously, a person who was on the system had to remain lying down with large tubes placed in the neck and groin. But doctors have modified the ECMO system so that a simple IV line is placed in the upper chest, allowing the patient to sit up, walk and remain active.

This new treatment may provide new hope for a better quality of life for thousands of patients awaiting a lung transplant.

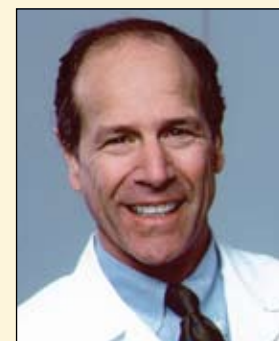
"We have been able to help Mr. Forsyth with a different approach. He is the first person in the United States, we believe, who is using this new, modified system to keep him alive as he waits for a lung transplant. Since he went on the machine on March 16, he has been alert and has gradually grown stronger, even able to walk on a treadmill," said Aldo T. Iacono, MD, associate professor, Department of Medicine. "It's a great alternative. Mr. Forsyth is not sedated or bedridden anymore and he is in better shape for undergoing a

transplant," continued Dr. Iacono, who also is medical director of the lung transplant program at the University of Maryland Medical Center. This mobility increases the chance that the patient will be in better physical condition for a lung transplant and may reduce the risk of infection and pneumonia. This new treatment may provide new hope for a better quality of life for thousands of patients awaiting a lung transplant.

Mr. Forsyth, a former truck driver who held a number of other jobs where he was exposed to substances that likely contributed to his emphysema, said, "I think this is the greatest thing because at this point I wouldn't be able to walk if it weren't for this machine."




Aldo T. Iacono, MD



Bartley P. Griffith, MD

Bartley P. Griffith, MD, professor, Department of Surgery, has been at the forefront of developing a small, portable artificial lung to help patients with severe lung disease. "This new approach may help us to further refine the technology to the point that patients can go home with an even smaller device. Eventually, we hope that some patients might be able to use this device indefinitely, even if they're not a candidate for a lung transplant," he said.


Almost 2,000 people in the United States are on waiting lists today for a lung transplant, according to the United Network for Organ Sharing. Emphysema is the most common type of chronic obstructive pulmonary disease (COPD). COPD affects about 32 million people in the US and is the fourth-leading cause of death. 



“It’s important for students to interact with faculty as individuals, not necessarily as teachers. More and more, medicine is about collaboration, and LinkMD will foster a connection as students advance and branch out in their careers.”

Several University of Maryland administrators and faculty have been instrumental in helping LinkMD get off the ground, including Donna Parker, MD, associate dean for Student Affairs, Gina Perez, MD, assistant dean for Student Affairs, Linda Lewin, MD, clinical associate professor, Department of Pediatrics, John Raczek, Web developer, Tracy Ijams, information management specialist, Trish Danielewicz, administrative assistant to Dr. Jarrell, and Larry Pitrof, executive director, University of Maryland Medical Alumni Association.

Jordan Ambrose, Christine Dobrosky, Bryce Olanczek, Andrew Riggan, and Craig Stauffer, from the Class of 2012, will head LinkMD in the 2009-2010 academic year.

For more information, email LinkMaryland@gmail.com or visit <http://web.me.com/linkmaryland>. Faculty interested in hosting a networking event should contact LinkMD with a date, time and venue. Also, an electronic sign-up is posted on MedScope, the Website for University of Maryland medical students. 

Five members of the Class of 2011 have spearheaded a project they hope will have a significant and lasting impact on the University of Maryland. Ethan Bassett, Christopher Lemon, Jeremy Pollock, Kristen Angster, and Lauren Wooley teamed up to create LinkMD, a social and professional networking organization for medical students at the University of Maryland School of Medicine. Their goal was to make it easier for students and physicians to connect, and to do so in a colleague-to-colleague fashion, as opposed to in a teacher-to-student manner. “In building this network among students, residents, faculty and alumni, we hope to promote a sense of solidarity and pride among our medical community and augment the resources and information we can offer to one another,” remarked Mr. Bassett. In addition, LinkMD will strive to enhance the education of medical students through mentorship and prepare them for professional life.

Bruce Jarrell, MD, executive vice dean, serves as the faculty mentor for LinkMD. When it was unveiled to students on January 13, 2009, Dr. Jarrell said “LinkMD will become an important part of this medical institution for both students and faculty.” He continued, “It’s important for students to interact with faculty as individuals, not necessarily as teachers. More and more, medicine is about collaboration, and LinkMD will foster a connection as students advance and branch out in their careers.”

Spring 2009 was LinkMD’s inaugural semester, and over 21 faculty members organized meetings with 135 students over brunch, lunch or dinner at local restaurants or in their homes. These gatherings have resulted in shadowing, mentoring and research opportunities as well as the creation of the Women of Color in Medicine Interest Group.

Call for Staff Stories!

SOMnews is looking for interesting stories about School of Medicine staff. Stories can be about unique hobbies, noteworthy extra-curricular events, significant ways you’ve assisted a charity and/or anything you think we might want to report. If you’ve got a unique story that you’d like to tell, please email Heather Graham Phelps at hgraham@som.umaryland.edu. We look forward to hearing from you!

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Mini-Med School for Kids 2009

The University of Maryland School of Medicine will conduct its third annual Mini-Med School for Kids in July. For six consecutive Wednesday mornings, School of Medicine faculty will talk with the children at the Salvation Army’s Franklin Square Boys & Girls Club.

Mini-Med School for Kids targets children (ages 5-14) from our underserved community in hopes of delivering key messages about important, and very relevant, health and lifestyle issues. Through these efforts, the program strives to educate and empower the children, in turn helping them to make better choices which will affect their health and the quality of their lives.

- Wednesday, July 8, 2009
Exercise, Health and Nutrition—Yvette Rooks, MD
- Wednesday, July 15, 2009
Allergies & the Environment—Mary Beth Bollinger, DO
- Wednesday, July 22, 2009
Stress Relief & Anger Management—Gina Perez, MD
- Wednesday, July 29, 2009
The Human Body—How it Works—David Pumplin, PhD
- Wednesday, August 5, 2009
Summer Skin Care—Corinne Erickson, MD
- Wednesday, August 12, 2009: **A Day @ the School of Medicine Medical & Research Technology Hands-On Session**—Deirdre Parsons, MS, and Eileen Patton, MS
- D.A.R.E. Program**—UMB Police Department
- Graduation**—Dean E. Albert Reece, MD, PhD, MBA

