ARIZONA SARVER HEART CENTER A publication from the University of Arizona College of Medicine Newsletter Issue 60 • Spring 2011





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Feinberg Endowed Chair in Stroke Research

The William M. Feinberg, MD, Endowed Chair in Stroke Research at the University of Arizona Sarver Heart Center was established to honor this physician and professor of neurology at the UA, who was one of the world's leaders in stroke research. His contributions

Continuing the Vision

The UA Sarver Heart Center and Department of Neurology are pleased to appoint **Leslie Ritter, PhD, RN**, professor of nursing at the UA College of Nursing and neurology at the UA College of Medicine, to the *Feinberg Chair*.

1986-2011

disease and stroke

O of progress

toward a future free of heart

ranged from greater understanding of stroke mechanisms to the role of coagulation in preventing stroke.

In 1996, Dr. Feinberg founded the first comprehensive stroke program at the UA College of Medicine. The program fostered basic science research, translated scientific findings into clinical research and gave patients access to the latest treatments for stroke.

Unfortunately, Dr. Feinberg died suddenly in 1997 at the age of 45, before he could see the full realization of the stroke program.

With support from his patients, colleagues and friends, his family established the endowed chair to further his vision of effectively treating and preventing stroke. "My dad cared enough for people to want to find a way to prevent stroke. So many people cared enough about my dad to remember him in this way," says Hope Feinberg, age 18.



Max and Hope Feinberg with Leslie Ritter, PhD, RN, (center) a stroke researcher who is filling the chair in their father's name. (Inset) Dr. Feinberg with his children in 1994.

"We are impressed with what Leslie is accomplishing on behalf of the stroke program here and confident that she is going to make excellent use of the resources made possible by this generous endowment," says Gordon A. Ewy, MD. director of the **UA Sarver Heart** Center

"Leslie is a great choice for the chair. She has strong dedication to the field of stroke. I feel that she will continue my dad's vision for stroke research and prevention," says Max Feinberg, age 20.

"This appointment is an honor and privilege. It will provide resources to carry on Dr. Feinberg's vision of providing a comprehensive stroke program that includes ongoing translational research and excellent clinical services," says Dr. Ritter.

Dr. Ritter's research focuses on minimizing the effects of inflammation on brain injury in *Continued on page 3*

...from the Director



It was 25 years ago in 1986 when the University of Arizona Sarver Heart Center was founded as the University Heart Center with the goal of preventing and curing cardiovascular disease through

the three pillars of research, education and patient care. Renamed in 1998 in recognition of generous support from the Sarver family, the Center now is composed of more than 175 physicians and scientists with national and international reputations from a number of colleges and departments. (See the member list on pages 10-11.)

This year, the Spring issue of the Sarver Heart Center newsletter reflects a time of renewal and growth as we welcome Dr. Robert Poston as one of the Center's new co-directors and the Jack G. Copeland, MD, Endowed Chair of Cardiothoracic Surgery. While Dr. Copeland was renowned as a pioneer in transplant surgery, Dr. Poston is a pioneer in the new frontier of cardiothoracic (CT) surgery robotics.

The Center's leadership also now includes Dr. Karl B. Kern as a new co-director and Kalidas Madhavpeddi, chief executive officer of Aurizon Resources, Ltd. in Phoenix, as the new chair of the advisory board. We thank Humberto Lopez for his many years of service as advisory board chair. You'll learn more about our new leaders in the next issue of the newsletter.

We are enthused to announce the new appointment to the William M. Feinberg, MD, Endowed Chair in Stroke Research, Leslie Ritter, PhD, RN, a professor of nursing in the UA College of Nursing and of neurology in the UA College of Medicine. She has a robust history of improving care for stroke patients in our community and advancing the field of stroke research.

New innovations are the cornerstone of a Center of Excellence, and we've encapsulated a number of advances on pages 6 and 7. Several previously invasive surgeries are being replaced by new minimally invasive procedures. Pediatric and adult cardiologists and surgeons are teaming up to provide the best combination of procedures for individual patients. New technologies from a more portable artificial heart to new tools in electrophysiology, are replacing more invasive procedures.

We also acknowledge people from our community who helped our Center grow. We are indebted to all of the leaders who have stepped up to help us achieve our vision of a future free of heart disease and stroke. On a sad note, we honor the memory of Valerie Vance-Goff, a long-time advisory board member, who recently lost her battle against cancer. On a celebratory note, we honor Mary Anne Fay who received the inaugural Mary Anne Fay Heart Health Advocate of the Year Award at the 2011 Healthy Heart Conference in February.

As we look at prevention, sometimes the more things change, the more they stay the same. Our health article is an update on my favorite top-10 list for preventing heart disease and stroke. You may feel as though you've heard these before, and you have, but they continue to be true and we need to be reminded of them. While fewer people now die of heart disease and stroke, these diseases remain the leading causes of death in the United States. So, read the article and take these tips to heart!

man GORDON A. EWY, MD Director, UA Sarver Heart Center

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Feinberg Endowed Chair in Stroke Research continued from page 1

patients with stroke. A decade ago, her research team was the first to identify a significant, early inflammatory response in the small blood vessels of the brain after stroke. She received the Presidential Early Career Award for Scientists and Engineers for these seminal findings. Since then, her laboratory studies have considered the relationships between inflammation and factors such as diabetes, aging and ethnicity. She currently is working on a study to understand the relationships among inflammatory genes, novel inflammatory blood markers and traditional risk factors in African Americans with stroke.

In addition to her research efforts, Dr. Ritter has been extremely effective in building interprofessional team skills for delivery of stroke services. In 2009, Dr. Ritter was a leader in University Medical Center's effort to become Tucson's first primary stroke center in Southern Arizona and continues as a coordinator for the stroke program. Dr. Ritter has dedicated herself to mentoring UA undergraduate and graduate students from a variety of health-related disciplines in stroke research and educating the public about stroke recognition and prevention.

"The chair will help research be done that can save people's lives. Stroke is a big problem and more work needs to be done to prevent and treat stroke," says Hope.

"Ultimately, this endowed chair is a testament and a commitment to improve the health and well-being of people who have suffered a stroke," says David Labiner, MD, head of neurology at the UA.

Adds Max, "The chair is very important for the future of stroke research; you never know what the future holds ..., but continued hard work is very important for discovery!"

New Chief of Cardiothoracic Surgery Named to Copeland Chair



Robert Poston, MD, nationally known for using robotics for minimally invasive coronary bypass surgery, is now professor and chief of the Division of Cardiovascular and Thoracic Surgery in the UA Department of Surgery, and a new co-director and *Jack G. Copeland, MD, Endowed Chair of Cardiothoracic Surgery* in the UA Sarver Heart Center.

His appointment makes University Medical Center the only hospital in Arizona, and one of only a handful in the nation, to offer robot-assisted minimally invasive coronary artery bypass surgery.

This surgery allows physicians to gain access to the heart with small incisions, unlike conventional bypass surgery which requires the chest to be opened with an incision by cutting through the breastbone (sternum). "With the robotic procedure, the patient has smaller scars, fewer side effects and complications, less pain, reduced risk of infection and faster recovery than with conventional bypass graft surgery," says Dr. Poston. "On average, hospital stay is reduced from six to three days."

"My aim for our division is to provide distinctive services that are highly valued by patients and their families," says Dr. Poston, who previously served as chief of cardiac surgery at Boston Medical Center. "Robot-assisted heart surgery is a prime example. Similarly, our internationally renowned mechanical-assist program can improve the quality of life for those with severe congestive heart failure."

Dr. Poston, who has authored more than 100 scientific papers and abstracts, is the principal investigator on several multicenter research studies. In a five-year initiative funded by the National Institutes of Health, he is exploring the use of high-resolution imaging technology during heart surgery to identify the optimal bypass graft for a patient. He also is investigating the ability of robotic surgery to accelerate the return of exercise tolerance compared to traditional surgical techniques.

"Besides bringing an innovative surgical method to the UA, we are very excited about Dr. Poston's research expertise," says Gordon A. Ewy, MD, director of the UA Sarver Heart Center.

"It is exciting to welcome Dr. Poston to the department," said Rainer Gruessner, MD, professor and chairman of the UA Department of Surgery. "As one of the foremost experts in minimally invasive cardiac surgery, Dr. Poston's arrival launches the University of Arizona into a new era of innovative heart care."

About the Copeland Chair

Jack Copeland, MD, one of the founders of the UA Sarver Heart Center and a legendary pioneer of heart transplantation and artificial heart technology at University Medical Center, served the UA for 33 years before leaving to establish a new program in California. When he celebrated 25 years as a distinguished faculty member here, Dr. Copeland's grateful patients, friends and colleagues established an endowed chair in support of the cardiothoracic surgery team. More than 400 families contributed to this endowment, a testament to their gratitude for the life-saving, innovative care provided by the transplant team.

Top 10 Tips to Prevent Heart Disease and Stroke

By Gordon A. Ewy, MD, Director, University of Arizona Sarver Heart Center

Cardiovascular disease is the major cause of death in America, accounting for 34 percent of deaths, many sudden and almost all of them premature. This is down from 40 percent just four decades ago, mainly due to treatment of common risk factors. If you have diabetes, your risk increases dramatically. The following is not comprehensive, but it is my "top-10 list" to prevent heart disease and stroke.

1. Take responsibility for your health.

The best prevention is to understand the risks and treatment options. The greatest risk is ignorance or misinformation. The first step is to take responsibility for your health and stay informed.

2. Know your risks.

The most influential risk factor for cardiovascular disease is **age** – the older you are, the greater your risk. The second is your **genetic make-up**. Although everyone is excited by the scientific progress in genomics research, conclusive gene tests are still in their infancy. But, as I tell our medical students, "A good family history is a poor man's gene test." We have long known that if your parents, grandparents or other relatives were afflicted with or died of heart disease, diabetes or stroke, your risk is much greater. For a full list of the presently recognized risk factors, visit the UA Sarver Heart Center website at <u>www.heart.arizona.edu</u>.

3. Don't smoke or expose yourself to second-hand smoke. The evidence is overwhelming that cigarette smoking and second-hand exposure to smoke increase the risks of heart disease, lung disease, peripheral vascular disease and stroke.

4. Maintain a healthy blood pressure.

High blood pressure, or hypertension, is known as "the silent killer" as most individuals have no symptoms. High blood pressure (BP) causes wear and tear of the delicate inner lining of your blood vessels. The higher your BP, the greater your risk. The risk begins to increase from a pressure of 115/70 mmHg and doubles for each 10 mmHg increase in systolic (the larger number) and 5 mmHg increase in the diastolic (the smaller number). Heredity and aging account for the greatest risk increase with high BP. Measuring BP at home reflects more accurately your risk than having the BP taken at a physician's office. It is worth the investment to get an automatic BP monitor. It is best not to rely only on the readings at your doctor's office as some individuals suffer from "white coat" hypertension – their BP is up only when they are at the doctor's office. Others have "masked" hypertension – higher when not in the doctor's office. Prognosis is best related to home BP. But for home blood pressure readings, you should not use finger or wrist units – only regular upper arm units.

5. Monitor your cholesterol (blood lipids).

Abnormal or high blood lipids (fats) are a major contributor to cardiovascular disease. Your blood lipids include the LDL (bad cholesterol; remember as "Lousy cholesterol"), HDL (good cholesterol; remember as "Healthy cholesterol") and triglycerides. The lower your LDL and the higher your HDL, the better your prognosis. The amount of cholesterol in your blood is determined mainly by three factors: the amount produced by the liver (this is largely genetic), the amount absorbed from the intestinal tract (some from what you eat, but a lot more from cholesterol produced by the liver and excreted as bile into your digestive tract) and, finally, age – your cholesterol increases with age. If you are at risk, medication is almost always necessary to lower the LDL or to raise your HDL.

The ideal ratio of total cholesterol divided by HDL cholesterol is 3.0. If higher, you might need diet as therapy. The problem with diet is that, in general, it can only decrease total blood cholesterol by about 10 percent. If you have a strong family history of elevated Lp(a) (a rare abnormal cholesterol that increases the risk) or an elevated ratio, drug therapy usually is needed.

6. Limit your calories.

Fad diets do not work. If any of them did, we all would be on THAT one, wouldn't we? The obesity rate in Americans is alarming, contributing to a near-epidemic of diabetes, which is a cardiovascular disease. If you have diabetes, your risk of suffering a heart attack is the same as someone who already had a heart attack. Obesity is caused by consuming more calories than your body burns. Abdominal obesity is also a major risk.

Portion sizes and the amount of sugars in the American diet have dramatically increased over the past few decades. At the same time, the daily amount of exercise has decreased. It is good to "drink slim" (water, tea, coffee). Use portion control before you start eating and push away from the table before you are "full." Did you know that it takes about 20 minutes before you "feel full?" So, if you eat until you are satisfied, you have already overeaten.

7. Make exercise a daily habit.

The lack of exercise also is contributing to the obesity epidemic in Americans. Studies indicate that if you are over age 69, walking two miles a day is optimal for overall health, and those two miles do not have to be done all at once. Besides burning calories, exercise activates genes that are beneficial to health in other ways. Exercise is one of the best treatments for depression and anxiety. However, exercise alone cannot control or reduce your weight – you also must modify your diet.



8. Pick your pills wisely.

The great interest in alternative medicine is understandable—patients want to be empowered to take responsibility for their own health. However, many take alternative medicines because of the way they are marketed. The mere fact that a substance is "natural" does not prove its health benefit. After all, nobody in their right mind would take arsenic simply because it is "natural." It is important to know that research data are often lacking for alternative medications, supplements and vitamins, none of which are regulated by the U.S. Food and Drug Administration.

Do we ever prescribe alternative medicines? On occasion we do! The major risk with many alternative medications is that the patients think they are doing something to improve health, when in fact they are not.

Although some vitamins have been shown possibly to help some conditions, to date none have been shown to decrease the risk of cardiovascular disease. It also is important to note that high doses of some vitamins may interfere or counteract the beneficial effects of some prescription drugs.

9. Reduce stress.

Stress contributes to cardiovascular disease and, if severe, can cause a heart attack or sudden death. There are plenty of options that help reduce stress, such as regular exercise, adequate sleep, striving for a good marriage, laughing, volunteering or attending religious services. In my view, watching TV—especially daily news—generally does not relieve, but aggravates stress. Also, try to avoid situations and people who make you anxious or angry.

10. Stay informed: Science changes constantly.

The only constant is change. This is especially true in medicine as new techniques and new insights develop constantly. Do not believe every piece of "scientific information" you find in the media or advertisements.

An overwhelming number of research studies that make it into scientific publications are poorly designed or yield data that are not representative; e.g., due to a lack of a sufficient number of participants. Keep in mind that many studies are financed or sponsored by individuals or companies with a vested interest in gaining favorable results. The situation can be especially confusing when scientific studies yield different or even contradicting results, and this is not uncommon.

So, begin to take responsibility for your health by following these 10 tips and you will be well on your way to improving and maintaining your health at every age and stage of life.

Heart Health Updates from UA

New Pulmonary Valve Procedure Avoids Open-Heart Surgery

Veronica Smith, age 26, was the first person in Arizona to receive a new pulmonary valve without having openheart surgery.

The procedure, known as the Melody Transcatheter Pulmonary Valve (TPV) Therapy, was approved by the FDA in 2010 and performed in March at the University Medical Center cardiac catheterization laboratory by pediatric interventional cardiologists Ricardo Samson, MD, G. Michael Nichols, MD, and the UMC catheterization lab team.

Veronica was born with the congenital heart defect known as tetralogy of Fallot and has undergone a previous heart surgery to replace the pulmonary valve in her heart.

"Over time, the artificial valve wears out such that it would need to be replaced approximately every seven to 10 years," says Dr. Samson, a UA Sarver Heart Center member. "In the past, pediatric patients who had their artificial valve placed during their first decade of life had to face multiple open-heart surgeries over the course of their lifetime. So, placing the Melody TPV by catheterization saves them from having numerous surgeries." ♥ The "hybrid team" includes UA Sarver Heart Center members Karl B. Kern, MD, chief of cardiology and director of the cardiac catheterization lab; Robert S. Poston, MD, chief of cardiovascular and thoracic surgery; and Molly A. Szerlip, MD, interventional cardiologist.

Hybrid Surgery-CathLab Gives Patients Best of Both Worlds

UMC's catheterization lab opened a new hybrid room that gives surgeons and cardiologists the ability to work in phases to do procedures that are most appropriate for an individual patient's needs. Many factors are considered when physicians decide whether a blocked artery should be unblocked by bypass surgery or catheterization. "For example, we consider the size of the arteries and veins, how hard it is to get to a spot and whether the patient also needs valve surgery," explains Molly Szerlip, MD, an interventional cardiologist.

When teaming up with Robert Poston, MD, chief of cardiothoracic surgery, his robotic skills for bypass surgery combined with a cardiologist inserting a stent with a catheter make these procedures less invasive for more patients.

The first patient was a 54-year-old man with unstable angina and a left main blockage who had very small vessels. "In the past, this patient would have been treated with a full sternotomy (cutting the breastbone) and two bypass grafts. The hybrid procedure technically was more advantageous for his circumstances, giving him the minimally invasive nature of stenting and the longevity of connecting the LIMA to the LAD," says Dr. Poston. (That is, connecting the left internal mammary artery to the left anterior descending coronary artery.) Next, Dr. Szerlip inserted a stent in the left circumflex artery (the artery to the bottom part of the heart). **V**

Developing a Catheter that Can Map and Zap

Electrophysiology cardiologists who specialize in heart rhythm disorders soon may be able to place sensitive electronics inside their patients' hearts with less invasiveness, enabling more sophisticated and efficient diagnosis and treatment of arrhythmias.

Electrophysiologists often use multiple catheters for mapping arrhythmia patterns

in the heart—often in a point-by-point fashion as the catheter is maneuvered in search of irregularities. They then use a specialized ablation catheter to cauterize the site where the arrhythmia originates.

"The new catheter is all in one, so it maps and zaps," says John A. Rogers, PhD, a professor of materials science and engineering at the University of Illinois, who led a research team that included Marvin Slepian, MD, of the UA Sarver Heart Center. He worked with other cardiologists to determine features that would be most useful for patient care. For example, the researchers added temperature sensors and mapped temperature distribution on actual tissue as areas were ablated. "Adding such a feature gives us greater insight as to what we are actually doing to the tissue," said co-author Dr. Slepian. "This will enhance the safety and effectiveness of ablation catheters, providing a new level of precision that we have not had to date." **•**

Sarver Heart Center Members

UMC Offers MRI-Safe Pacemaker

A new pacemaker that can be used safely in a magnetic resonance imaging environment (MRI) is now available. The older patients get, the more likely they are to develop arrhythmias and possibly need pacemakers. They also are more likely to develop a condition in which an MRI may be needed for diagnosis. However, the magnetic field may interfere with the pacemaker.

Up until now, doctors have turned to other imaging modalities, such as a CT Scan, or they carefully selected and monitored patients who were able to undergo an MRI safely.

So, is this MRI-safe pacemaker for everyone? Both Julia Indik, MD, and Peter Ott, MD, recommend that age-old advice: talk to your doctor and make a decision that is best for you. "It's important to distinguish between 'wanting' an MRI and 'needing' an MRI," says Dr. Indik. She also is concerned about the larger size



New pacemaker technology may be a good option for patients likely to need an MRI.

of the MRI-safe pacemaker and says the long-term performance is not yet known. "Clearly situations come up where this technology is useful and this gives physicians options to consider." "If a patient has preexisting pacing leads from a prior device implant, these would prohibit safe MRI scanning and may need to be removed if the MRI is vital, a procedure that is not without risk," says Dr. Ott. "Most likely I would consider this device for patients who need only basic pacing support and are very likely to need MRI scans in the future, such as patients with cancer or those at high risk for stroke."

This MRI-safe technology does not yet apply to implantable defibrillators. Plus, the MRI-safe pacemaker limits how the MRI scan can be done with regard to the body area scanned (currently not approved for chest MRI) and the MRI magnetic field strength, says Dr. Ott. ♥

Young Mom with a Healthy Baby and a Failing Heart Enjoys Gift of 'Freedom'



Marcela Padilla, 21, became the first Total Artificial Heart (TAH) patient in Tucson to leave the hospital while awaiting a heart transplant. She walked out of University Medical Center Jan. 20 with a backpack slung over her shoulder. Inside was the 13.5-pound Freedom portable driver, powering the SynCardia temporary TAH implanted in her chest.

Marcela gave birth to a baby boy in April 2010, but four days later, she struggled to breathe. "I was short of breath. I couldn't sleep at night. I couldn't take care of my baby. I was too weak and my body was really swollen."

M. Cristina Smith, MD, director of Heart Transplant and Ventricular-Assist Device Services, and assistant professor in the UA Department of Surgery, is unsure what caused the idiopathic cardiomyopathy. Pregnancy could have strained a heart that was already genetically weak. By September, there were no options but to remove the dying portion of Marcela's heart and implant the TAH. Dr. Smith says the Freedom gives hope to those awaiting transplant. "Up until now if you had biventricular failure – the failure of both sides of your heart – and your only option was the Total Artificial Heart, you knew you were stuck in the hospital until we could find you a matching donor heart." In such cases, patients have been tethered to "Big Blue," a 418-pound machine that powers the TAH.

"What we're really hoping is down the road the Freedom can be an option for people who are walking that fine line between being a transplant candidate and not being a transplant candidate because their organs are starting to fail," says Dr. Smith. "People can be on this a couple of months to improve organ function and make them transplant candidates where they were not," she adds.

After extensive training in the care of the Freedom for Marcela and her family, she is continuing to wait for her new heart at home. "It was so exciting to go home and be with the baby," Marcela says. ♥

Community Advocate of the Year

Turning a Heart Attack into an Attack on Heart Disease in Women



n 1999, Mary Anne Fay's life took La detour when she learned that the pain in her jaw was not a suspected ear infection, but a heart attack. Surprised to find herself-along with her husband Mark—among the ranks of heart patients, she joined him on the UA Sarver Heart Center Advisory Board in 2003. In 2004, when Dr. Ewy sought an advisory board member to help the Center launch a focus on heart disease in women, Mary Anne volunteered to chair the Women's Heart Health Education Committee

Under her leadership, the committee helped the Center develop relationships that have led to significant contributions, including the Allan and Alfie Norville Endowed Chair for Heart Disease in Women Research. The group launched an annual October luncheon to raise awareness about women and heart disease (*see "Save the Date" on page 12*), organized numerous health lectures in Tucson and other communities, and established the Community Coalition for Heart Health Education for Women of Color.

When the Sarver Heart Center developed the *Mary Anne Fay Heart Health Advocate of the Year Award*, it was only fitting that the inaugural award was given to its namesake.

"It is a privilege to be Mary Anne's cardiologist. She has done so much to turn a life-threatening condition into an educational crusade for better understanding of the symptoms of heart disease in women and for advancing cardiovascular research and patient care," says Gordon A. Ewy, MD, director of the UA Sarver Heart Center. ♥

In Memory of Valerie Vance-Goff

Our condolences are extended to the family of long-time UA Sarver Heart Center advisory board member Valerie Vance-Goff, who lost her battle against lymphoma this past February. She and her late-husband Bob, who suffered from heart disease, were great supporters of Sarver Heart Center.

Valerie started her career in the food and beverage industry, including stints in Beverly Hills and Tanzania. She had a great enthusiasm for learning and for connecting people. During the 1990s, she was a leading member of the Sarver Heart Center's Heart to Heart Committee that advocated for changes



on restaurant menus and improvements inpatient services.

During this time, Valerie and Bob were entrepreneurs in Tucson's optics industry and leaders in the burgeoning optics cluster. She helped create and served on the board of the Arizona Optics Industry Association in addition to providing administrative support for professional organizations such as the National Association of Women Business Owners, Tiempo Tucson and The Breakfast Club of Tucson.

We will always remember her work to help build the UA Sarver Heart Center. ♥

Marcus Visiting Professors Enhance Cardiology Education



This year's Marcus visiting professors: William G. Stevenson, MD, and Lynne Warner Stevenson, MD.

The Samuel and Edith Marcus Visiting Professor in Cardiology Program was established in 1997 by Dr. Frank Marcus, his brother Julius and sister Shirley in honor of their parents. The purpose is to enhance education and research for students, residents, fellows and faculty in cardiology. This year, Lynne Warner Stevenson, MD, director of the Cardiomyopathy and Heart Failure Program at Brigham and Women's Hospital and professor of medicine at Harvard Medical School, gave a lecture entitled "To Travel Hopefully," tracing the history of medicine and philosophy and showing how the fields converge at our current medical frontiers, including end-of-life care.

William G. Stevenson, MD, director of the Cardiac Electrophysiology Program at Brigham, professor of medicine at Harvard and Lynne's husband, delivered

an academic lecture on diagnosing and managing cardiac arrhythmias and preventing sudden death. ♥

All in the Family of Cardiology



With the imminent completion of his cardiology fellowship, Adam Baumgarten, MD, *(left)* becomes the third generation in a line of cousins to be affiliated with the cardiology section at the UA College of Medicine. Frank Marcus, MD, *(center)* professor emeritus and founder of the section of cardiology, was the trailblazer for the family. He was followed by Mark J. Friedman, MD, professor of medicine, director of the Heart Failure Program and Cardiac Transplant Service, and the *Thomas and Sabina Sullivan Sr. Endowed Chair for the Prevention and Treatment of Heart Failure*, who completed his cardiology fellowship here during the very early years of the program. For the record: Dr. Marcus' mother and Dr. Friedman's grandmother were sisters. Dr. Baumgarten's father is Dr. Friedman's cousin.

Study Shows "CPR" Video Can Train Laypeople

In the United States, bystanders attempt CPR only about 26 percent of the time, according to Bentley J. Bobrow, MD, an emergency medicine physician, medical director of the Arizona Department of Health Services EMS and Trauma Bureau and UA Sarver Heart Center member. In a study recently published in *Circulation*, Dr. Bobrow and his associates demonstrated that by watching a brief video, people could retain enough information to have sufficient skills to do chest-compression-only CPR and virtually every viewer was willing to make an effort to save a life.

After having study participants watch one of three videos or not watch any video (the control group), they tested the participants' ability to perform CPR during an adult out-of-hospital cardiac arrest simulation. All training groups that watched a video had significantly higher median compression rates and greater median compression depth compared to the control group.

Six-minute Video Could Save Lives

This study supports what Sarver Heart Center doctors have been advocating for a while now: watching Sarver Heart Center's six-minute training video could allow you to be a life saver. It teaches how to do chestcompression-only resuscitation. The free video is posted on YouTube and features Gordon A. Ewy, MD, and Karl B. Kern, MD, the physician researchers who developed this new approach to CPR. To watch the video, visit *http://medicine.arizona.edu/ sarver-cpr.*

Best Practices

The "Arizona model," developed by Drs. Ewy, Kern and Bobrow and advocated throughout the state to laypeople, emergency responders and hospitals, was featured in *Best Practice in Emergency Services* as a way to reduce deaths from sudden cardiac arrest.

Chest-compression-only CPR also was number one on the *Reader's Digest* "Life-Saving List" in the March 2011 issue.



Growing a Center of Excellence

Founded in 1986 as University Heart Center, the University of Arizona Sarver Heart Center received its new name and a major push for development and growth in 1998 when the Sarver family made a significant gift that laid the groundwork for the building that now houses faculty office and research space.

The UA Sarver Heart Center has grown to a diverse membership of 175 physicians and researchers from a number of UA colleges, divisions of the College of Medicine in Tucson and Phoenix, the Southern Arizona VA Health Care System and the Arizona Department of Health Services.

Thanks to ongoing donor generosity, the Sarver Heart Center supports 11 endowed chairs for outstanding faculty and more than \$150,000 annually in start-up research grants. The following list illustrates the diversity of our current membership base and celebrates our first 25 years of interdisciplinary collaboration and teamwork.

Appointment Line: (520) 694-8888 or (800) 524-5928 Development Office: (520) 626-4146 or (800) 665-2328 www.heart.arizona.edu

Anesthesiology

Peter Lichtenthal, MD Charles W. Otto, MD Daniel Redford, MD Mathias Zuercher, MD

Cardiology

Aiden Abidov, MD, PhD Joseph Stephen Alpert, MD Samir Dahdal, MD Gordon A. Ewy, MD Paul E. Fenster, MD Mark J. Friedman, MD Julia H. Indik, MD, PhD Karl B. Kern, MD Kwan S. Lee, MD Frank I. Marcus, MD Peter Ott, MD William R. Roeske, MD Marvin J. Slepian, MD Vincent L. Sorrell, MD Molly Szerlip, MD, FACP Gerald A. Wolff, MD Connie Doner, FNP Sharon Gregoire, NP





Native American Cardiology Program (NACP) Eric A. Brody, MD

Southern Arizona VA Health Care System (SAVAHCS)

Steven Goldman, MD Elizabeth Juneman, MD M. Reza Movahed, MD, PhD Mark Sharon, MD Hoang Thai, MD Sergio Thal, MD

Cardiology Fellows

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Endowments Help Build Centers

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