

Gift Makes Women's Heart Clinic Possible



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6 Beating the odds: African American women are disproportionately at risk for heart disease and efforts are under way to turn the tables



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Glenda Jackson remembers the exact moment she realized there was a problem: "I was walking across the golf course – something I should have done easily – and was unable to catch my breath."

This experience and the advice of a doctor friend led her to the University of Arizona Sarver Heart Center. "After meeting with a few of the doctors at the Center, I knew I was in the right place," adds Mrs. Jackson. Grateful for the care that she and her husband, Jerry, received, Mr. and Mrs. Jackson chose to make an extraordinary gift to the Sarver Heart Center.

"We have been very fortunate in this life," explains Mr. Jackson. "It is important to both Glenda and me that we be good stewards of what we have. This gift is one way we feel we can do this."

"Jerry and Glenda's investment in the Sarver Heart Center has allowed us to do something that will have a profound impact on how we are able to treat women with cardiovascular disease," says Gordon A. Ewy, MD, director of the Sarver Heart Center. "Beginning June 1, 2010, we will open the *Jerry T. and Glenda G. Jackson*

Clinical Research Program for Heart Disease in Women, a special clinic dedicated to prevention, diagnosis and treatment of heart and vascular diseases in women," says Dr. Ewy.

High School Sweethearts

During their senior year in high school in Grants, N.M., Jerry and Glenda began dating. Soon after, they knew that they wanted to

spend the rest of their lives together. "We got married at age 19. We didn't have any money, so we drove to Santa Fe for an overnight honeymoon," recalls Mr. Jackson. This year will mark their 49th wedding anniversary. Together they raised two children, Craig and Jill, and are now happy to be spending time with their grandchildren.

Their route to Tucson was not a

straight-shot. During his time with Merck & Co., Mr. and Mrs. Jackson found themselves living all over the country, and Mr. Jackson traveling extensively throughout the globe. "I say I traveled the world; what I really should say is that I have been to a lot of hotels. I never had much time to enjoy the places I was sent," says Mr. Jackson.



Glenda and Jerry Jackson's gift is helping to establish a Clinical Research Program for Heart Disease in Women.

...from the Director

It is with pleasure and expectation of continued advances in the care of women facing cardiovascular disease that we announce a major gift from the Jacksons to support our planned Jerry T. and Glenda G. Jackson Clinical Research Program for Heart Disease in Women. (See cover story.)

Continuing our series, The ABC's of Heart Disease, "H" is for "Heart Disease in Women." Why this emphasis? Heart and vascular diseases in women often have unique causes and symptoms. Although these differences have gradually been appreciated over the last decade, this program will lead to continued improvement in the diagnosis and management of cardiovascular disease in women, including women of different races.

The goal for all of our Sarver Heart Center programs is that they are based on the academic pillars of research, education and patient

care. The

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Research, is

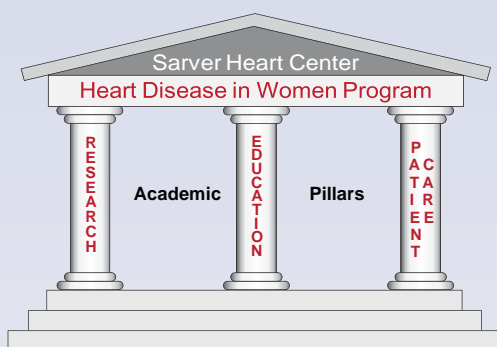
the strength
behind the basic

research pillar; The "Brach" Foundation Endowed Lectureship, supports the educational pillar; now the Jerry T. and Glenda G. Jackson Clinical Research Program for Heart Disease in Women provides the foundation for the "patient care" pillar. Our plan is to continue to expand and improve our Heart Disease in Women Program so it will become one of America's best.

Our Sarver Heart Center's Advisory Board's "Women's Heart Health Education Committee," chaired by Mary Anne Fay, is a catalyst for our Heart Disease in Women research, educational and patient care initiatives. They are committed to supporting not only Heart Disease in Women initiatives, but also heart disease in minority women.

This issue, just in time for Mother's Day, is all about heart and vascular diseases (including stroke) in women.


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



'Gift Makes Women's Heart Clinic Possible,' continued from page 1

"I went on a trip with Jerry thinking that we would be able to do some sightseeing together – let's just say it only took the one trip for me to know that I wouldn't do that again! We really just saw cabs and hotel rooms."

Mr. Jackson, while not a doctor, is no stranger to the field of medicine. His more than 30-year career with Merck gave him a unique perspective on the health-care systems of the world, and how new and better drugs can help those who are suffering. He began his career with the sales force of Merck. "My territory was quite large, but I really enjoyed what I was doing," he recalls. Quickly rising through the ranks, he eventually served as president of Merck's Worldwide Human Health Division and senior president of the Specialty Chemicals Business.

Mrs. Jackson adds, "I know now that women often have different and unique symptoms from heart disease. If I had to give a girlfriend advice, it would be, 'don't wait for a big event!' If you are having odd signs, go see your doctor and be insistent that he or she considers your heart. Looking back on it now, my symptoms spanned over two years – I was having trouble catching my breath after simple tasks. While she encourages education, she stresses one should not be preoccupied with their disease. "You need to have a life!"

With much gratitude for the generosity of the Jacksons, Sarver Heart Center announces the opening of the Jerry T. and Glenda G. Jackson Clinical Research Program for Heart Disease in Women, on June 1, 2010. This special clinic, located at University Medical Center, is dedicated to prevention, diagnosis and treatment of heart and vascular diseases in women. One novel aspect of this clinic will be to develop approaches to identify genetic markers for cardiovascular disease in women, moving a step closer to "boutique" or personalized medicine. For more information and appointments, please call (520) 626-2000. ♥

The UA Sarver Heart Center Newsletter is published three times a year - in spring, fall and winter. News reporters are welcome to quote from newsletter articles and are asked to provide credit. Correspondence or inquiries should be addressed to: UA Sarver Heart Center, Public Affairs, PO Box 245046, Tucson, AZ, 85724-5046.

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The Greatest Gift a Mother Could Get

Mother's Day will be more meaningful for Tracey Wolter and her 16-year-old daughter, Amber Christiansen. Amber's actions gave her mother the gift of a second chance at life.

This past February, Tracey, 36, suddenly collapsed while walking with Amber in Glendale, Ariz. "At first I thought she had tripped. I turned her over and called her name, but she was unconscious. I began to freak out, and then I realized I had to call 911," recalls Amber.

With paramedics dispatched, the 911 operator calmed Amber down and explained how to do Continuous Chest Compression (CCC) CPR. Studies have recently shown that CCC-CPR, developed at UA's Sarver Heart Center, more than doubles survival for individuals with cardiac arrest.

The Glendale Fire Department is one of a growing number of fire departments around the country that uses this new method as part of its emergency response in cases of cardiac arrest. "Bystanders are often reluctant to do mouth-to-mouth resuscitation, but are more willing to use



Amber Christiansen, age 16, and her mother, Tracey Wolters, thank Glendale firefighter paramedics for their life-saving help.

this approach," says Gordon A. Ewy, MD.

Tracey is not taking her second chance lightly. In addition to appropriate medical management, she has begun to make lifestyle changes, such as quitting smoking.

"Everyone should know CCC-CPR. I would hope someone sitting next to me in a restaurant, arena or bus would know how to perform it. Anyone can learn it. And you never know when you will need it," says Glendale Fire Capt. Scott Kahoutek.

Visit www.azshare.gov or www.heart.arizona.edu for information on CCC-CPR training classes. Sarver Heart Center offers free training the first Wednesday of the month at 5:30 p.m. in DuVal Auditorium at UMC, 1501 N. Campbell in Tucson. Call (520) 626-3766 for details. ♥

Be a Lifesaver with Continuous Chest Compression CPR

If you see someone collapse who isn't responsive and has trouble breathing:

1. Tell someone to call 911 or make the call yourself.
2. Position the person with the back on the floor. Place the heel of your hand on the center of the chest (between the nipples) and the heel of your other hand on top of the first. Lock your elbows, position your shoulders over your hands and use your upper-body weight to "fall" downward. Lift your hands slightly each time to allow the chest

wall to recoil. Try to compress at 100 beats per minute and about two inches deep. (Think *Stayin' Alive* by the Bee Gees.)

3. If an automated external defibrillator (AED) is available, turn it on and follow the instructions. If not available, do chest compressions (taking turns with someone if you get tired) until paramedics arrive.

Note: Mouth-to-mouth CPR still is recommended for drowning, drug overdoses and very small children.

'H' is for Heart Disease in Women

By Gordon A. Ewy, MD

In the United States, cardiovascular disease is the major cause of death in both men and women. While cardiovascular diseases in men and women share many similarities, there are distinctions requiring different diagnostic and therapeutic approaches. These differences are of increasing importance, for while the mortality of men with cardiovascular disease has been decreasing gradually since the mid-1980s, the mortality in women has been on the rise!

Decades ago, heart disease in women was thought to be uncommon.

Why was this?

1) Pre-menopausal women tend to be spared from coronary artery disease, particularly if they don't smoke, have diabetes, markedly abnormal cholesterol values or blood-clotting abnormalities.

2) Women were less likely to be enrolled in early cardiovascular disease therapy studies, as women of child-bearing age were excluded for safety concerns.
3) In most of the early cardiovascular studies, individuals over age 65 were not included—they were the “elderly.” In retrospect, this prevented women from entering clinical trials at an age when their disease was most likely to become clinically apparent.

Because of the previous perception that heart disease was not a significant health problem in women, many doctors took the “Bikini approach” to women's health care - screening only for breast and cervical cancer, often ignoring the risks of cardiovascular disease. However, a woman is 10 times more likely to die of cardiovascular disease than she is to die of breast cancer.

It Isn't Your Father's Angina

Both men and women experience angina (chest pain or discomfort) due to blockage in the coronary arteries that supply the heart muscle. Men are more likely to have a myocardial infarction (heart muscle damage due to complete blockage of a coronary artery) as their initial manifestation of heart disease.

In men, atherosclerosis (combination of cholesterol, scar tissue and inflammatory cells) causes angina by narrowing the coronary artery. In women, angina is often due to blockages caused by coronary spasm, in which the muscles in the coronary artery contract, making the artery smaller in one area and limiting blood flow to the heart muscle. This means coronary angiography, which is used mainly to look for blockage in the large



coronary artery, often misses this cause of a woman's angina.

As a result, many women with positive stress tests and angina previously were told there was nothing wrong with their hearts because their coronary angiograms were normal. Rarely, women have received coronary artery stents or bypass surgery that was not necessary as the narrowing in the coronary artery was due to unrecognized coronary spasm and not due to atherosclerotic blockage.

Angina in women also may be caused by blockages in the smallest of heart vessels. Today, this microvascular disease can be diagnosed by sophisticated magnetic resonance imaging (MRI) cardiac chemical stress tests.

Women's symptoms make angina harder to detect. Recent studies have shown that unlike angina in men, most often characterized by chest or left-arm discomfort, angina in women often presents as weakness, fatigue, shoulder, stomach or back pain or shortness of breath. Treadmill electrocardiographic (ECG) stress tests are more likely to be falsely positive in women, contributing to diagnostic confusion. In one large study, 83 percent of men, but only 50 percent of women with positive ECG monitored stress tests had significant blockage in their coronary arteries.

Classic angina seems to be more benign in women.

While 25 percent of men with angina suffered "heart attacks" within five years, heart attacks occurred in only 17 percent of women with angina. In all studies of heart attacks due to total or near-total blockage of a coronary

artery, 75 percent were men and 25 percent women. Thus, the "classic" heart attack is three times more common in men; yet, when women do have a heart attack, their mortality rate is higher.

What are other distinctly different aspects of heart disease in women?

- 1. Stress** often triggers heart dysfunction in women. Epitomized by expressions such as, "She died of a broken heart," clinical observations of how some individuals experience severe stress or respond unusually to minor stress, have led to our understanding of a condition now called "stress cardiomyopathy." In most studies, more than 90 percent of patients with **stress cardiomyopathy** are women, a condition associated with high levels of adrenalin, irregular or fast heart beating and heart failure. Fortunately, these are most often reversible. Tragically, the condition may result in sudden death in the most extreme cases—"She was scared to death."
- 2. An abnormally stiff heart is often the cause of a woman's heart failure.** In men, heart failure is most likely due to damage of the heart muscle from one or more heart attacks, rendering the muscle weak and unable to contract normally. Heart failure in women, on the other hand, is often due to an **abnormally stiff heart muscle**—the heart contracts as it should, but is too stiff to relax normally and requires a higher amount of pressure to fill the major pumping chamber. This higher pressure backs up into the lungs, resulting in symptoms such as shortness of breath, especially with exertion.
- 3. Hypertension (high blood pressure)** is more common as one gets older, and if inadequately treated, often leads to heart failure due to an abnormally stiff heart, a syndrome more common in women since they tend to live longer than men. Early treatment of hypertension is the best prevention, and research is needed to determine how best to prevent the abnormal heart "scarring" that comes with age, aggravating the condition.

What is optimal cardiovascular care for women?

First, the classic risk factors of high blood pressure, abnormal lipids, diabetes and others, which are often hereditary, need to be addressed. In addition, a healthy lifestyle is recommended, including appropriate diet, weight control, activity or exercise, not smoking and avoiding second-hand smoke. These risks and lifestyles are the same for men and women.

While we are learning more about gender differences, the opening of the Jackson clinic dedicated to heart disease in women will add another dimension to the Sarver Heart Center's research, educational and therapeutic efforts. ♥

African American Women Face the Highest Risk of Cardiovascular Disease

Compared to women of any other race, African American women face the highest mortality rate from cardiovascular disease. They have a higher risk of heart failure, high blood pressure, stroke and sudden death.

The following three stories illustrate the need for new approaches for the diagnosis and treatment of cardiovascular disease in this population.

The Need for More Research

Gael Sylvia Pullen, 54, the mother of a college hockey player, watches her diet and leads a very active life, enjoying cycling, dancing and rollerblading. One night, she was relaxing in her living room, reading a book. Out of nowhere, her heart started racing, skipping beats. Gael felt so weak that she had to lie down. After being rushed to the hospital and admitted to a cardiac care unit, her doctors were unable to diagnose her condition. Over the past eight years, Gael repeatedly has suffered from sudden bouts of irregular heartbeats, or arrhythmias. Every 18 to 24 months, this unresolved condition seems to flare up, overshadowing Gael's life with reminders of her increased risk for stroke and sudden cardiac death.

"With no known family history of any heart issues or cardiovascular disease, a healthy diet, manageable stress and athletic lifestyle, I am living proof that more research is needed for African American women in the area of heart health education and

prevention of cardiovascular disease," Gael reflects.

"Individuals of various ethnic groups are different in terms of risk factors and the way they respond to disease. One type does not fit all."



Gael Sylvia Pullen has lived with irregular heart beats for eight years. She holds a photo of her niece, Misti, who died of sudden cardiac arrest at age 35.



Anna Jolivet, EdD, her persistence led her doctor to look beyond her recovery from breast cancer surgery to discover heart disease was causing her shoulder pain.

Without Warning

Gael's niece, Misti, newlywed after years of being a hardworking single mother of two sons, was sitting at her computer on a Saturday morning, making plans for the annual field trip to Washington, D.C., with her class of 8th graders. Her son, Marques, 17, was still asleep in his room, while his younger brother, Michael, 11, was at his grandparents' house. Around 9 a.m., Misti had difficulty breathing. Marques woke up, startled by his mom's call for help. He called 911 immediately. The ambulance arrived 10 minutes later, but not soon enough. Misti had died of cardiac arrest at the young age of 35.

"Misti's tragic death is now a part of our family's history," says Gael. "As we struggle to make sense of our unexplainable cardiac history, the unexpected loss of my niece, followed by the lives of two friends taken by cardiovascular disease, I know that we must be aware of the threat posed by heart disease."

While Focusing On Something Else

Several years ago, Anna Jolivet, EdD, a Tucson native with a history of leadership and community service and a 40-year

career with Tucson Unified School District, discovered a lump on her left breast. Her oncologist confirmed that it was breast cancer. After a radical mastectomy, Dr. Jolivet followed her physical therapy instructions to minimize shoulder pain. After several months, she asked her oncologist when she should expect the pain to subside. His response of “maybe never” was not what she was hoping to hear.

“I told my primary care physician about this during a regular visit, and he suggested that I go for a stress test,” says Dr. Jolivet. The test and an examination by a cardiologist showed that she had significant blockage in her coronary artery. Delay wasn’t an option. Her surgery was scheduled for four days later and she had a successful recovery.

“I was pleased that my primary care doctor knew to check my heart. I had no other discomforts that would have alerted me to expect a heart condition,” says Dr. Jolivet.

As these cases illustrate, cardiovascular research that focuses specifically on women of color is urgently needed, as are improvements in resources for educational awareness and prevention. That’s why the Sarver Heart Center is strengthening its research on ethnicity and heart disease as well as minority outreach. ♥

Sarver Members Study Presented at American College of Cardiology Shows Equality in Grafts for Bypass Patients

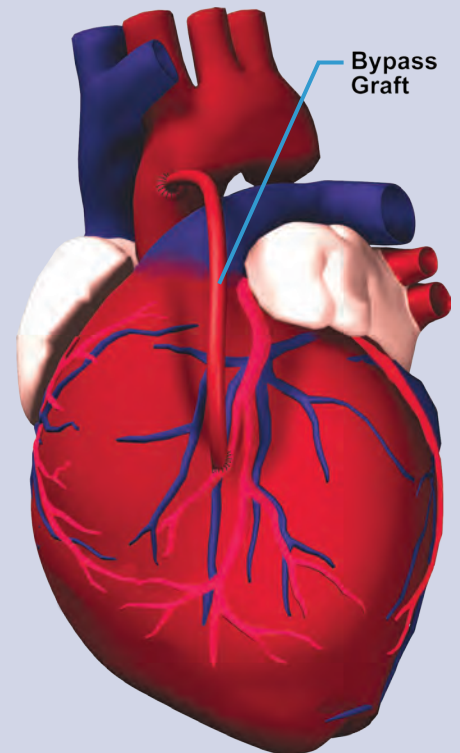
Which is better for coronary artery bypass graft (CABG) patients: a saphenous vein taken from a patient’s leg or a radial artery taken from a patient’s wrist? Sarver Heart Center members are leading a Veteran’s Administration Cooperative Study to answer this question. The results after one year show that there are no differences between these two blood vessels used for coronary artery bypass grafts.

“Both radial artery and saphenous vein grafts remained unobstructed in 89 percent of patients after one year and had similar rates of complications,” says Steven Goldman, MD, chief of Cardiology at the Southern Arizona Veterans Administration Health Care System and the study’s lead researcher. He presented the results at the American College of Cardiology (ACC) national meeting in Atlanta.

“Some cardiac surgeons prefer radial artery over the saphenous vein. While it may take longer to remove and may be more difficult to connect to the aorta, in theory it might withstand aortic pressure better because it is an arterial vessel,” says Gulshan Sethi, MD, the surgical co-chair of this national study. “We were surprised to see the same patency (openness of the graft) rate after one year. However, follow up of only one year is too short to draw a definite conclusion. We will need a five-year or longer follow up of patients to conclusively answer the question of which of these vessels should be used for coronary artery bypass grafts,” says Dr. Sethi.

The study included 733 patients from 11 VA centers. “It’s important to point out that these VA Hospitals had one of the lowest surgical mortality rates (0.7 percent) in the world,” says Dr. Sethi.

With more than 165,000 CABG procedures done in 2008, studies such as this are very important, says Dr. Goldman. Heart disease, the No. 1 killer of men and women in the United States, consumes about 43 percent of Medicare dollars. ♥



During a bypass procedure, a surgeon takes a healthy blood vessel segment from the leg or arm to create a “bypass” around the blocked portion of the coronary artery.

Raising Minority Awareness and Funds for Research

With cardiovascular disease being a leading cause of death among African Americans, especially women, the African American Young Investigator Award will be granted for the first time this year. This hopefully will lead to other research grants to support medical researchers who are early in their careers and have an interest in heart-health issues that affect women from ethnically diverse backgrounds.

The effort is being led by Wanda Moore, Gael Sylvia Pullen and Gail Black Hughley. “Our goal is to create an endowment that will fund several awards each year,” says Mrs. Moore.

These women share family histories and numerous stories of friends who became victims of heart disease. This commonality

has nourished their desire to reach women of color to educate them about prevention, risk factors, diagnosis and treatment through the Sarver Heart Women’s Heart Health Education Committee’s Minority Outreach Program. The program focuses on African, Asian, Hispanic and Native Americans. “At all of our community programs, we encourage people to get involved and support research at Sarver Heart Center. No amount is too large or small,” says Mrs. Moore.



Sharing a bond of families and friends with heart disease, (l. to r.) Gail Hughley, Gael Sylvia Pullen and Wanda Moore are helping Sarver Heart Center’s Minority Outreach Program raise awareness and funds.

Young Investigator Studies Peripheral Arterial Disease in Women of Different Races

Peripheral arterial disease (PAD) affects about 8 million Americans and is prevalent especially in patients 65 and older. The classic symptom is cramp-like pain in the legs when walking. As with many other cardiovascular diseases, women not only have different PAD symptoms than men, but in many women symptoms are non-existent. Left untreated, women with PAD are four times more likely to have a heart attack or stroke, and four to five times more likely to die within five years.

Molly Szerlip, MD, is conducting a clinical study to identify the prevalence, risk factors and symptoms of PAD among women older than age 40. Since many conditions affect various races differently, Dr. Szerlip is tracking females by racial backgrounds.

“There is a paucity of studies evaluating the prevalence rates of peripheral artery disease in women. There needs to be further studies to characterize this disease process. Our findings could result in earlier and better treatment options for women with PAD,” says Dr. Szerlip.

During the next year, if you’re a woman over 40 years

old who visits the internal medicine or women’s health clinics at UPH Hospital, expect to be asked to enroll in this study. Dr. Szerlip is seeking 1,000 female participants to complete a health survey, undergo a non-invasive PAD screening and commit to participate for a one-year period.



Molly Szerlip, MD

The PAD screening entails ankle-brachial index (ABI) testing, which includes blood-pressure measurement and Doppler-signal recording of the pulses in the ankle and brachial arteries. (The brachial is the major blood vessel of the upper arm.) If these arteries are too stiff (another quirk of womanhood), toe pressures will be taken. These tests are performed by trained nurses or technicians and only add a few minutes to the typical blood pressure and weight check at the beginning of a checkup. ♥

Honoring a Tradition of Giving Back

By Lisa Lucas

When University of Arizona alumnus Howard Richardson died of cardiac arrest in October 1989, his wife, Margaret, decided to honor him by giving back to his alma mater to support cardiovascular research at the Sarver Heart Center.

Howard graduated from the UA in 1940 with a bachelor's degree in business administration. "He was very dedicated to the school," Margaret says. Throughout his college experience he belonged to various campus organizations including the Blue Key Honor Society and business fraternity Alpha Kappa Psi.

Following graduation and after serving in the U.S. Navy during World War II, Howard continued to support the University. In addition to attending homecoming as often as possible, he was a spokesperson for the school's \$80 million Century 11 Capital Campaign in 1989.

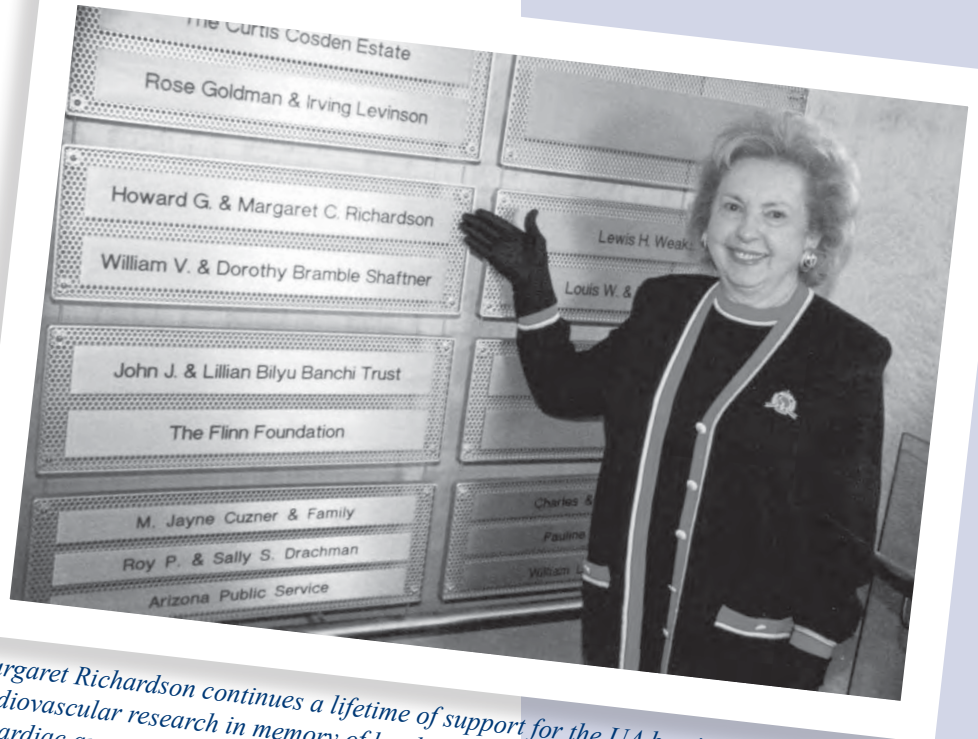
Margaret continues Howard's tradition of giving back to the UA. "I feel that, if you're successful, you should support organizations that will make a difference," Margaret says.

She has established four charitable gift annuities, 14 charitable annuity trusts and three charitable unitrusts to benefit the Richardson Endowed Chair in the Sarver Heart Center and the Richardson Endowment at the Arizona Cancer Center.

Over the years, Margaret has developed close friendships at the UA and its centers. "They're like an extended family to me," Margaret says. "I can call on them for help and they are right there."

The Richardson's gifts currently provide income to Margaret, her great nieces and her sister-in-law. "It is such a good investment, both for the donor and for the centers," she says of giving through an annuity. "A lot of people give outright cash gifts, but if you don't have a whole lot of money and want an income while you're alive, an annuity is a good vehicle to use." ♥

Margaret Richardson continues a lifetime of support for the UA by giving to cardiovascular research in memory of her husband, Howard, who died of cardiac arrest in 1989.



Charitable Remainder Annuity Trusts

A charitable remainder annuity trust offers a donor an income stream for life. However, unlike a unitrust, the income stream remains constant. The donor also receives an immediate income tax charitable deduction.

The process begins when the donor creates an irrevocable trust with assets such as stock or other property. The donor names a trustee to manage the trust for the benefit of the UA. The trust assets can be sold by the trustee without capital gains consequences. When the donor dies, the remaining assets pass to the UA Foundation to benefit an area of the donor's interest.

Lowering the Risks of Stroke in Women

By Leslie Ritter, PhD, RN, and Bruce Coull, MD

Every year, more women (425,000) than men (375,000) suffer a stroke. Why is this? Women live longer and stroke rates increase substantially with age. As an increasing proportion of women reach their eighth and ninth decades, an even greater number are expected to be affected by stroke.

Women are an average of four years older than men when they have a stroke. They also are more likely to have significant risk factors, such

as atrial fibrillation (an irregular heart rhythm) and hypertension (high blood pressure). Treating these conditions can reduce significantly the risk of first or recurrent stroke. (See “*You could be having a stroke*” on page 11.)

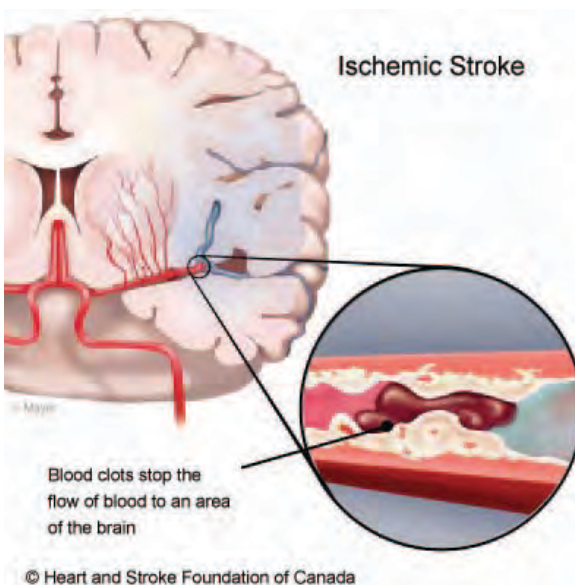
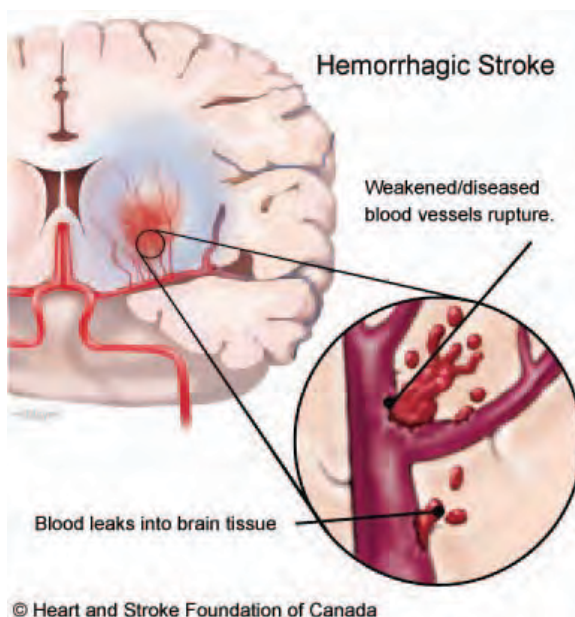
If you are an African, Mexican or Native American woman, unfortunately your stroke risks are higher than your Caucasian counterparts.

Several studies of hormone therapy (HT) have focused on whether HT can prevent cardiovascular disease in postmenopausal women. While some debate continues, the general consensus is that HT is not beneficial in preventing stroke in postmenopausal women who are healthy or had a previous stroke. In women of child-bearing age, the use of oral contraceptives is associated with an increased stroke risk, particularly among smokers. This makes screening for stroke risk prior to the use of oral contraceptives extremely important.

The vast majority of strokes in both women and men are ischemic strokes (in which an artery supplying the brain is blocked, depriving it of oxygen and nutrients). However, women are at higher risk for the other major cause of stroke: rupture of an artery in the brain (hemorrhagic stroke). The trio of female gender, cigarette smoking and hypertension increases the risk of hemorrhagic stroke.

A transient ischemic attack (TIA) has all the symptoms of a stroke (see page 11), but the symptoms clear rapidly (therefore transient) with no permanent brain damage. However a stroke with permanent brain damage often follows a TIA. Seeking prompt medical attention is essential, even if stroke symptoms resolve rapidly.

When an ischemic stroke or transient ischemic attack does happen, women and men experience similar symptoms (see page 11). They also seek help in comparable numbers, but unfortunately they often do not seek help fast enough. **Therapy**



to reverse the cause is only effective during the early hours of a stroke. Unfortunately, the total number of people seeking treatment for ischemic stroke within this “therapeutic window” remains low, often leading to devastating complications. This is why the Sarver Heart Center pursues continuous educational campaigns to educate and remind people about the signs and symptoms of stroke and the need to call 9-1-1 at the onset of symptoms. A “brain attack” is a medical emergency just like a “heart attack.”

Stroke Care

Hospital care for women and men with stroke is the same. For ischemic stroke, care includes clot-busting treatment to open the blocked artery to supply blood to the brain. Extensive research demonstrates that when stroke care is delivered according to best practices, patient outcomes improve. In March 2009, University Medical Center obtained Joint Commission Primary Stroke Center certification, the first to do so in Southern Arizona. This designation ensures a team approach to the delivery of quality stroke care from the time the patient enters the emergency department through the time of discharge.

The trip to the emergency department and the hospital stay are usually a brief period in the life of a stroke victim. Disability and reduced quality of life after stroke may affect a person for years.

Unfortunately, both outcomes are consistently poorer in women than in men, but the reasons for this are not clear. Post-stroke depression also is greater in women



Living longer, irregular heart rhythms and high-blood pressure put women at greater stroke risk.

than men. Clearly, more research is needed to examine how we can improve outcomes after stroke in women.

While the overall incidence, risk factors and outcomes for stroke are different in women than in men, attention to risk reduction and formalized stroke care has the potential to reduce these disparities. Clinicians and researchers at UMC’s Primary Stroke Center and the Sarver Heart Center are dedicated to reducing the number of strokes and improving outcomes after stroke...in women and men!

Leslie Ritter, PhD, RN, FAAN, is a coordinator of the UMC Primary Stroke Center, and a faculty member of the UA College of Nursing, Department of Neurology and the Sarver Heart Center.

Bruce Coull, MD, is the medical director of the UMC Primary Stroke Center, faculty member of the UA Department of Neurology, associate dean for Clinical Affairs, College of Medicine, and member of the Sarver Heart Center. ♥

You could be having a stroke if you experience:

- Sudden numbness or weakness of the face, arm or leg
- Sudden confusion, or trouble speaking or understanding
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden severe headache with no known cause

You are at greater risk of having a stroke if you:

- Are age 55 or older
- Have had a stroke or TIA
- Have high blood pressure
- Smoke cigarettes
- Have diabetes
- Have heart or blood vessel disease
- Have high cholesterol
- Have atrial fibrillation
- Have sickle cell disease
- Have a high red blood cell count
- Take birth control medication



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Congratulations to University Medical Center for being recognized as one of the Top 100 Hospitals in the nation for the fifth consecutive year. UMC is one of only 15 academic medical centers to make the list. Thomson Reuters, national health-care consultants, awards this recognition based on objective measures, including outcomes, patient satisfaction and financial performance.

Becker's Hospital Review magazine also named UMC one of the 10 best hospitals in America for 2009, placing it on a prestigious list of 10 elite hospitals the magazine singled out for consistently high rankings, as cited by industry associations, Thomson Reuters, HealthGrades and Leapfrog and *U.S. News & World Report*.

Save the Date

The Heart of the Matter

.....
Women and Heart Disease

An educational luncheon for women
and their loved ones

October 16, 2010

Skyline Country Club
Tucson, Arizona

**Watch for further information
about this event in your mail.**