



BILL PUGLIANO : GETTY IMAGES

IN MEMORY: Marlene Jaimes wears the number of Fennville, Mich., basketball player Wes Leonard, who died after a game

MEDICINE: Research may save young athletes

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senseless tragedy of it all.

In most of these cases, we know the cause. More often than not, these sudden deaths in young athletes — both male and female — are tied to certain heart abnormalities that some children are born with and that are relatively difficult to detect. An abnormal thickening of the heart known as hypertrophic cardiomyopathy can cause fatal abnormal rhythms in the heart, interrupting abruptly its function. Another condition involves an abnormality in the major artery supply to the heart (coronary arteries), which can also lead to abnormal and life-threatening heart rhythms. A third important cause of sudden cardiac death is the deposition of fat and fibrous tissue in the right heart.

These conditions often manifest themselves when unknowing and otherwise fit young people are under exertion, such as during a sports competition or in basic training for the military.

These anomalies are about 70 percent of the recognized causes of sudden cardiac death in the U.S., and in too many cases, the first symptoms are the last. Thus the poignant — and fleeting — headlines.

A public policy debate has raged for years about whether more intense heart health screenings, including electrocardiograms, should be required before young athletes play sports. Are the costs too high for such screenings? Is the prevalence of these heart anomalies too low to justify the costs? And even electrocardiograms have been shown to be effective in detecting such abnormalities only 50 percent to 70 percent of the time.

So, what can we do? Fortunately, there is much more to do than simply writing our hands in endless debate. And fortunately, Houston is home to foresighted people like Rich and Nancy Kinder and their Kinder Foundation, who have helped to underwrite ongoing research into these problems. This research, through the Center for Coronary Artery Anomalies at the Texas Heart Institute at St. Luke's Episcopal Hospital, includes the screening of 10,000 middle school students in the Houston Independent School District and other area schools to detect abnormalities in the heart prior to their leading to sudden death in children.

Using the most accurate detection methods — a combination of electrocardiography

(EKG) and Magnetic Resonance Imaging (MRI) — our mobile imaging unit has been in the field for several months now and has screened almost 500 young athletes and other students. The screening basically involves taking pictures of these students' hearts. No needles or drugs are involved.

This prevention-oriented research hopefully will help us answer the important health and public policy questions, and we will learn much more about both prevention and prevalence of the heart abnormalities in a large diverse population, such as Houston's.

Along the way, if students are found to suffer from these heart abnormalities, their parents and doctors will be able to make informed decisions about their children's health and sports participation.

It will be some time before the research is complete, but for now, there are two things we know for certain.

One is that these tragedies will continue to happen and will continue to make horrific headlines.

We also know that sitting on the sidelines and doing nothing while tragedy continues to strike is not an option.

Willerson is president and medical director of the Texas Heart Institute at St. Luke's Episcopal Hospital in Houston; Long is chairman of the THH Board of Directors. Angelini is director of the THH Center for Coronary Artery Anomalies.

ESTABLISHING DIALOGUES

Science, diplomacy and international collaboration

Let's use this powerful tool to break down barriers with nations

By EDWARD P. DJEREJIAN, NEAL F. LANE and KIRSTIN R.W. MATTHEWS

THE recent dramatic events taking place in the broader Middle East pose major challenges for the United States, making it all the more important that the Obama administration craft policies that respond to the dynamics of change in the region. One often-neglected but powerful diplomatic tool is known as "science diplomacy," the sharing of scientific information and establishing scientific collaborations with nations in which the United States has limited political relations. Polls show that American scientific research is widely respected throughout the world, even in nations whose citizens do not, overall, have a positive opinion of the United States. For instance, a 2004 Zogby poll showed that only 11 percent of Moroccans have a positive view of the United States, but 90 percent had a favorable view of U.S. science. Of 43 countries surveyed, U.S. science exceeded the general favorability of the United States by an average of 23 points. For this reason, it is often possible to establish constructive discussions and cooperative scientific efforts, especially ones that relate to food, water, health, energy and other human needs, when other channels of communication are closed.

The very nature of scientific investigation encourages interactions between



PAUL LACHINE

researchers, regardless of where they happen to live and work; hence, research collaborations spontaneously arise regardless of the political climate between host countries. These one-on-one or small group contacts are sometimes one of the few avenues for communication between the United States and a particular country and can provide a platform for industrial partnerships, educational outreach and global community development. At its best, science diplomacy is a means to create opportunities for civic engagement in difficult political environments.

Science diplomacy, even if not widely recognized as such, has been an effective diplomatic tool since World War II. U.S. scientists engaged Soviet scientists throughout the Cold War even when relations between the two governments were severely strained. During

President Richard Nixon's visit to China in 1972, the two countries identified science as an area of cooperation. Now, President Barack Obama is engaging Muslim-majority nations by sending prominent scientists as science envoys to talk with scientists, students and policymakers in the broader Middle East as well as Southeast Asia. Their mission is to explore opportunities for collaboration as well as encourage scientific research and science, engineering and technology education to engage countries in a dialogue as well as find new opportunities for scientific partnerships.

As the international community faces extraordinary global challenges, such as accessing affordable health care, clean water and carbon-free energy, combating infectious diseases and mitigating and adapting to climate change as well as a host of related sustainability and security issues, tensions across borders will only increase. New information and communication technologies are providing borderless tools of unprecedented power (at an ever accelerating pace) that will continue to allow people with similar interests to form connections regardless of where they live.

Many U.S. scientists are eager to work with their counterparts in other countries, but significant barriers to international collaborations remain in place, especially U.S. policies on visas and export controls. Foreign students and visiting scientists continue to have trouble obtaining visas to study or attend conferences in the United States. In addition, the State Department's handling of export controls limits interactions between scientists and in some cases inhibits U.S. industry development. By deeming a large and overly broad list of scientific areas as military-sensitive (includ-

ing computer software and hardware, biological materials and space technology, much of which is available from foreign companies) the federal government has created an environment where collaboration is unnecessarily difficult and sometimes impossible. Although the Obama administration has been working to improve how the federal government handles export controls as well as visas, there is still much to be done.

As science diplomacy begins to be recognized around the world as a powerful diplomatic tool, the barriers to international scientific collaboration may be reduced or removed, which could lead to the lowering of barriers between nations on other pressing issues.

On Wednesday, the Baker Institute will host a discussion with Norman Neureiter, former science adviser to Secretaries of State Madeleine Albright and Colin Powell, and Ambassador James Glassman, undersecretary of state for public diplomacy and public affairs from 2008-2009. The event will highlight the ability of scientists to improve diplomatic relations by doing what they do best — talking about their work and collaborating with others. More information can be found on the Baker Institute website www.bakerinstitute.org.

Djerejian, the founding director of the James A. Baker III Institute for Public Policy at Rice University, is a former U.S. ambassador to Syria and to Israel; Lane is a senior fellow in science and technology policy at the Baker Institute as well as the Malcolm Gillis University Professor and a professor of physics and astronomy at Rice University; Matthews is a fellow in science and technology policy at the Baker Institute and a lecturer for the Wiess School of Natural Sciences at Rice University.

HISTORY: Heritage under siege

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get frenzy that calm heads should step back a moment and realize that these changes contemplated to the Texas Historical Commission have the unintended consequences of undermining the very thing that makes Texas a place like no other and creates such a significant and statewide economic benefit. Texas history should not be negotiable. It should be revered, guarded and upheld.

This article was submitted by the following former commissioners of the Texas Historical Commission: Gail Loving Barnes, Odessa; Jane Barnhill, Brenham; Bob Bowman, Lufkin; J.P. Bryan, Houston; Jan Bullock, Austin; Shirley Caldwell, Albany; Lareatha Clay, Dallas; T.O.

Fehrenbach, San Antonio; Jean Ann Ables-Flatt, Terrell; Frank Gorman, El Paso; Boo Hausser, San Antonio; Eileen Johnson,

Lubbock; Karl Komatsum, Fort Worth; John Preston, Childress; Steve Tomka, San Antonio; and Linda Valdez, Rockport.



ROBERT B. BURGE : SPECIAL TO THE CHRONICLE

TIME FOR PRESERVATION: The dome of the Harrison County Courthouse in Marshall is adorned with a clock. The courthouse now serves as the Harrison County Historical Museum.

CHILDREN: We need better training for workers in child care

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participation in the College Bound from Birth program made the difference. As a pediatrician and member of the College Bound advisory board, I've watched five participating child-care centers in Sunnyside and South Park come alive with the realization that they provide an entire world for their charges.

College Bound from Birth is a neighborhood-based program led by Collaborative for Children to enrich the lives of area children — children whom we all need — where limited resources means getting a good start can be hard. The program collaborators provide quality early education, family support, access to health care and community engagement. Eventually this program hopes to raise up the neighborhood as it raises up the experience for the child.

It is now the norm for children to be in care outside the home. Sixty-three percent of children by age 5 are cared

for in centers, day care homes or by relatives. As a society, we count on care outside the home as an institution that supports the work-life of parents.

When that care falls dramatically short, as it did in the case of Jackie's Day Care and the terrible fire with its tragic outcome, we have to question our assumptions about the safety and adequacy of child care.

For instance, a common misconception is that the state makes sure staff members in licensed centers are well-trained. The rather shocking reality is the state requires only eight hours of preservice training and 15 hours of annual training for caregivers, and 20 hours of annual training for directors.

Many, many child care centers recognize this standard is woefully deficient and voluntarily set far higher training standards for their staffs. Some for-profit centers say training is important but they

can't afford it. Some low-income centers receive outside resources that support additional training. Given the impact of trained teachers in child outcomes, these disparities set up a fundamental inequity for children.

We need the Texas Legislature or the Child Care Licensing agency — either could do it — to raise the minimum standards for training. While they are at it, they could raise the standards for adult-child ratios and maximum class size, as well. Our Texas standards don't make us look too good — even when compared with the higher-poverty states around us. More importantly,

without quality early care and education, our children fail to enter school ready to learn.

We need child-care centers to step up for children. Yes, training is a profession in a low-wage profession. But incremental change can be managed and absorbed as part of the cost of doing business as it is in many others, such as restaurants or retail.

Online training can help reduce training costs. And, where resources permit, programs like College Bound or others that bolster quality early care can play an important role in making sure that caregivers are well-trained.

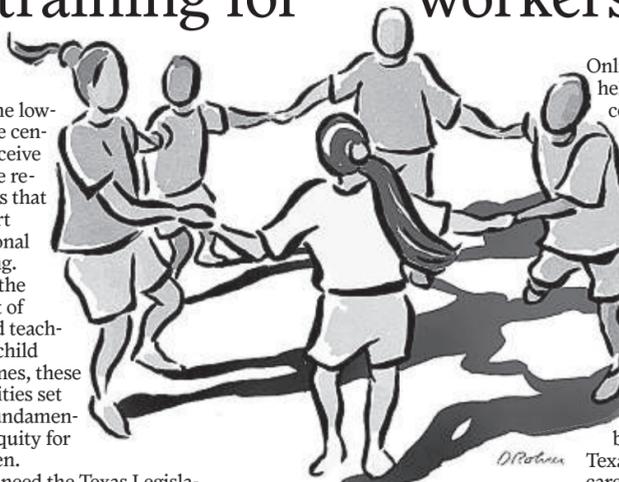
Another way to help level the playing field would be to ensure that Texas uses its child care subsidy dollars to support quality child care programs. Right now, the subsidy has become so low that many child-care centers have simply opted out, just as doctors leave the Medicaid program when rates are low. By offering the incentive of higher provider rates for higher programs, some of these centers may find it feasible to again offer child care in the subsidy

program.

These reforms are of intense concern to child-care professionals and those in the child-care industry. To succeed, the early care and education agenda needs to be of intense concern to everyone — from educators to engineers, from business executives to brain surgeons, from homemakers to home builders.

If the flare of interest in child care extends only as long as it takes to bring Jessica Rene Tata back to Texas, we have missed an opportunity to focus on the awareness that many children in child care deserve a system with higher standards. Out in Sunnyside, there's a child care director with fire in her belly to do a better job. And she needs our support.

Austin, a retired pediatrician, is a board member of Collaborative for Children and founder of Project Medical Home, Texas Children's Hospital.



D. Roberts