

THE MAGAZINE OF TULANE UNIVERSITY SCHOOL OF MEDICINE | SPRING 2009

TULANE | MEDICINE



HIGH-TECH
TEAM TRAINING

CONNECTIONS
FOR THE HEART

VACCINATION
INNOVATIONS



It is with great excitement that I announce the opening of the Tulane Center for Advanced Medical Simulation and Team Training. It is actually two centers in one: a center for procedural training using high-fidelity simulators and a center for team training. It is this unique, seamless integration of two programs in a single location with quality training that

keeps Tulane School of Medicine at the forefront of medical education.

Located in the Murphy Building at the School of Medicine, the 14,000-square-foot facility is designed to simulate every aspect of a healthcare system, including a multi-bed emergency room, an operating room, a labor and delivery suite, patient rooms and even a doctor's office and nursing station. The Center enables all healthcare professionals, medical students, nursing students, residents, nurses, faculty-physicians and technicians to practice and perfect technique in a safe environment.

The second valuable purpose of the center is to train teams of healthcare workers using principles developed from Crew Resource Management (CRM). Patient safety is the responsibility of both the healthcare environment and all healthcare workers involved with patient care. An evidence-based program developed by the Department of Defense and the Agency for Healthcare Quality Research, TeamSTEPPS™ is designed to improve communication and teamwork skills among healthcare professionals. The goal of TeamSTEPPS is to provide tools that enhance healthcare systems that maximize improved patient safety.

During my time at Harvard Medical School/Beth Israel Deaconess Medical Center, my department was the first in obstetrics and one of the first in clinical medicines to successfully adapt the principles of Team Training and CRM from commercial aviation and the military. I know from experience the significant positive impact that effective team training offers for patient safety and well-being.

To schedule a tour of the Tulane Center for Advanced Medical Simulation and Team Training, please email simcenter@tulane.edu or call 504-988-9150.

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ON THE COVER

Among the features of the new Tulane Center for Advanced Medical Simulation and Team Training is an operating room, with realistic manikin "patients" that can appear to breathe — or die.



MATCH DAY HITS HIGH NOTES

Sparked by the sound of Dr. Marc Kahn and his trumpet playing “Reveille” and “Call to the Post,” the match began. Match Day, that is, when seniors at Tulane University School of Medicine get those coveted white envelopes that tell them the residency programs in which they will spend the next few years.

Kahn, professor of medicine and senior associate dean for admissions and student affairs, has opened Match Days on high notes for years. “It gets people excited,” he says.

The 137 seniors this year have a special reason for excitement—it’s the Katrina Class. Three weeks after they started medical school, they evacuated for Hurricane Katrina and spent the rest of the year of medical studies in Houston.

The Class of 2009 is noteworthy for its determination to return to New Orleans, despite the disruptions caused by the storm, Kahn adds. “We only had 12 students in the whole school transfer, so we lost less than 2 percent of our student body to transfers.”

Thirty-one of the seniors—about 23 percent—will stay in Louisiana, with the rest scattering among institutions in 27 states. That’s about the usual proportion, Kahn says. “We always like the good students to stay, and certainly they did, but we also placed students in some of the best programs in the country.”

Seven newly minted physicians will go to residencies at Harvard and at least three to Johns Hopkins, as well as to the University of California at San Francisco and Duke, among many other programs. Primary care is the choice of 39 percent of the graduates. The top three residency areas are internal medicine (17), orthopaedics (16) and pediatrics (13).

The School of Medicine received 9,500 applications for 177 spots in the class that will enter in 2009, which Kahn calls “an amazing ratio.” The numbers have increased about 20 percent a year since Hurricane Katrina, he says.

“We continue to attract students from all over, and we continue to attract quality students. When we ask them what brings them to Tulane, they say ‘You guys have a commitment to the community.’ They know we’re serious about this. It’s part of what

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OUR NUMBERS NOT ONLY
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20 TO 22 PERCENT A YEAR.”

—Dr. Marc Kahn



Engaged students Lauren Eckert and Stefan Ploch are happy to be staying in New Orleans.



Married students Jill Tanenbaum Cierney and Bennett Cierney celebrate the discovery that they will go to the Medical University of South Carolina, he in anesthesiology and she in obstetrics and gynecology. Under his arm, Bennett holds the traditional pot of Match Day money. Each student contributes \$3 upon entering the ballroom; the money goes to the last person to receive a match.

we do. I'm enthusiastic that we're getting folks to New Orleans, we're getting them to work in the community and they're staying," Kahn says.

The National Resident Matching Program pairs graduating seniors at medical schools around the nation with academic medical institutions. The computer-generated residency assignments are released at the same time at Match Day events at every medical school across the country. At Tulane's 2009 Match Day ceremony, held at the New Orleans Hilton Riverside Hotel on March 19, anxious and excited seniors, many with family and friends, awaited news of where they would be serving their residencies.

Soon, however, any anxiety turned to jubilation, with cheers, high-fives and the sound of champagne corks popping.

"We had a pretty fantastic match," says John Wysocki, president of the student body, who will enter the internal medicine residency program at Tulane. "We've been through a lot as a class, and I think that bonded us all together, so we were cheering for everyone to get their matches."

Lauren Eckert and Stefan Ploch, who first met on arriving at Tulane in August 2005, evacuated separately from Katrina, then met again in Houston during their first year. Now they are engaged. Eckert chose dermatology and Ploch chose radiology. "In the match process, we went the way of the couple's match, where you link your lists so you can end up together," Eckert says. Both matched in programs at Tulane.

So did former Notre Dame football player Casey Dunn, choosing a combined program of internal medicine and neurology. "The next five years will be a lot of hard work, but also really enjoyable—a lot of good people are staying here at Tulane," he says. "I'm really excited to get in and start working."

Rick Smith, a senior at New York University's medical school, will enter the internal medicine residency program

at Tulane. "New Orleans was a really big draw," he says. "It's a city that's been hit with a lot recently, and there's a lot of opportunity to get in there and help out, taking care of a population that's often overlooked."

For a complete list of residency matches, visit <http://tulane.edu/som/admissions>.



Former Notre Dame football player Casey Dunn, in a cap that indicates his Tulane match, with his parents.



Signs give the green light to healthy grocery items.

JUMPSTARTING RURAL HEALTH

Tulane medical student France Fung is standing in a grocery store in rural Pierre Part, La., pushing cereal samples to shoppers. Not just any cereal—healthy cereal.

She is part of JumpStart Pierre Part, a program designed and launched in 2007 by a team of six Tulane medical students in collaboration with two local doctors to encourage people to eat healthier foods. It is an initiative in a larger Tulane School of Medicine program to encourage young physicians to locate in underserved rural areas.

In a town with a population of just over 3,000 in Cajun country west of New Orleans, JumpStart Pierre Part has become an ongoing partnership between Tulane and

the local school, businesses, government and families. JumpStart team members have collaborated to improve school menus and encourage healthy snacks. The town library holds monthly nutrition seminars, JumpStart has helped organize a 5K run/walk and health fair and has contributed healthy choices at the town's annual food fest. Tulane medical students maintain a JumpStart website and publish articles in the *Bayou Journal*, the local newspaper.

Fung even developed a Pierre Part cookbook that includes modifications of favorite local recipes by lowering fat, increasing fiber and eliminating empty calories.

JumpStart makes for a healthier community—with fewer problems from rampant obesity, diabetes, hypertension and other illnesses. And the lifestyle changes exemplify what family medicine is

all about, says Dr. Rick Streiffer, professor and chair of the Tulane Department of Family and Community Medicine.

There's a growing need for primary care physicians outside urban areas, especially in Louisiana, where more than 90 percent of the state is designated as a primary care shortage area. As few as six of the nearly 400 medical students who graduated from the state's three medical schools in 2008 are projected to enter rural primary care practices.

In an attempt to slow this trend, Streiffer's department established the Tulane University Rural Medical Education Program in 2004 to recruit and train medical students from rural areas who intend to return to the small towns dotting the Gulf South. Dr. Benjamin Sachs, senior vice president of the university and dean of the medical school, also has established the Rural Outreach Initiative, to help communities identify and nurture their own future physicians. Two full-tuition scholarships each year go to students from rural Louisiana who make a commitment to return to primary care practices in those areas.

Excerpted from the fall, 2008, issue of Tulanian. To read more, visit <http://tulane.edu/tulanian>.



Tulane medical student France Fung shares habits of healthy eating with members of the Pierre Part community.

ROBOTIC SURGERY CAN HELP SAVE KIDNEYS

Recent advances in surgical procedures allow more patients to live with kidney cancer, continuing to maintain their normal schedules and lifestyles. Dr. Benjamin Lee, director of robotics, laparoscopy and endourology for Tulane Medical Center, seeks to preserve kidney function through minimally invasive surgery.

Robotic surgery allows the surgeon a 3-D view of the surgical field as well as unequalled dexterity, maneuverability and precise control, says Lee, a professor of urology in the School of Medicine. Using a console to direct a surgical robot, Lee removes only the cancerous tissue from the kidney plus a small margin of normal tissue, and then repairs the defect in the remaining normal kidney tissue. This approach allows 50 percent to 75 percent of the kidney to be spared and puts less stress on the remaining kidney.

"This remnant of kidney is enough to keep the patient off dialysis if anything adverse happened to the other kidney," says Lee, who has extensive experience with minimally invasive approaches to treating kidney and prostate cancer, and specializes in robotic urologic cancer surgery.

Lee has pioneered several innovative surgical techniques in the treatment of kidney and prostate cancer, and he is the author of more than 250 manuscripts and abstracts.

At the 26th World Congress of Endourology in Shanghai, China, in November, Lee received the Arthur D. Smith Endourology Lectureship, known as the "Arthur" Award, which goes to the urologist who has made significant contributions to the discipline of urology. The Endourological Society recognized Lee for his expertise in state-of-the-art techniques for minimally invasive urological surgery, particularly laparoscopy and robotic surgery.



Dr. Benjamin Lee, director of robotics, laparoscopy and endourology for Tulane Medical Center, treats kidney and prostate cancer through minimally invasive surgery.

HYSTERECTOMIES GO HIGH-TECH

The Department of Obstetrics and Gynecology has begun offering robotic surgery for hysterectomies using the daVinci Robot, similar to robots used by **Dr. Benjamin Lee** (see related story). **Dr. Rachel E. Reitan**, assistant clinical professor, and **Dr. Simie Degefu**, associate professor, have recently been certified in the procedures. Benefits include a faster recovery time and smaller incision, since this method is less invasive than other surgical techniques.

PICTURING A KIDNEY

An image by **Dr. Ihor Yosypiv**, associate professor of pediatrics in the School of Medicine, made the cover of *Kidney International*, the official journal of the International Society of Nephrology. The image on the cover of the Nov. 2, 2008, issue shows expression of the Sprouty 1 messenger RNA in the embryonic mouse kidney detected by a technique called in situ hybridization. In addition, Yosypiv's textbook, *Pediatric Nephrology*, has been published in the Ukrainian language by Nova Knyha Publishers.



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**THESE ARE PEOPLE
WHO ARE BEING LED AROUND
BLIND. THEY CAN'T EVEN
SEE THEIR HANDS
IN FRONT OF THEIR FACES.**

”

—Dr. Delmar Caldwell

SIGHT FOR SORE EYES

The courtyard outside the small clinic near Cintalapa, Mexico, is always full when news spreads that doctors are in town.

Tulane eye surgeon Dr. Delmar Caldwell, three other Tulane doctors—ophthalmology fellow Dr. Gus Stern and residents Dr. Jessica Laursen and Dr. Arley Jaramillio—and registered nurse Susan Sarver flew to the poverty-stricken area last fall for three all-day surgery sessions, where they successfully treated more than 80 patients.

Caldwell has organized medical mission trips to Cintalapa and two other small towns in southern Mexico for more than 20 years to help patients suffering from eye disease.

“Some people walk for two or three hours to catch a bus to ride another five hours to get to this clinic,” says Caldwell, professor and chair of the Tulane Department of Ophthalmology.

The vast majority need cataract removal, with subsequent implantation of an artificial intraocular lens, typically restoring sight when bandages are removed the next day. “These are people who are being led around blind. They can’t even see their hands in front of their faces,” Caldwell says. “After the cataract removal when they go home, they are ambulating by themselves, reading their Bibles and their papers.”

Stern and Caldwell performed 10 corneal transplants, which replace the clear part of the eye in front of the iris and pupil with donor tissue.

Caldwell says the rewards of such missions are many. It’s a great feeling to be able to help so many people in a lasting way, but it’s also an important lesson in altruism—and medicine—for his residents, Caldwell says. He and Stern spent more than an hour and a half walking residents through cataract surgeries at the beginning of the mission. “When we finished, they were doing cases all by themselves in 20 to 30 minutes. So it’s a tremendous educational experience for them.”

Caldwell paid for lodging and expenses while medical supply companies donated equipment, including more than 650 pounds of supplies from Alcon Laboratories. Sidney Lassen, a 1955 graduate of Tulane’s A.B. Freeman School of Business and a

longstanding supporter of the medical missions, donated the use of his plane and pilot support.

As the number of patients needing treatment continues to grow, Caldwell hopes to continue with future relief missions to Mexico. “The sad thing is that you go there and you do the surgeries ... when you shut down, there is still a courtyard full of people there wanting to be seen.”



Members of the Tulane University medical team load their precious cargo of corneas for transplants as they prepare to fly to southern Mexico for a medical mission to treat eye diseases.



Richard Brucker, a second-year medical student at Tulane, has developed a user-friendly online listing of New Orleans area health clinics that offer free or low-cost medical care.

MED STUDENT MAPS FREE HEALTH CLINICS

A Tulane University medical student has made affordable health care easier to find. Second-year student Richard Brucker created NolaFreeHealthCare.com, an online listing of New Orleans-area clinics that offer free or low-cost medical care to those who don't have insurance and can't afford health care. The continually updated listing, which is also distributed on paper at area homeless shelters and community centers, includes each clinic's hours of operation, costs, population served and types of care offered.

"With the economy in a recession, people are struggling with healthcare costs and feel like they don't have access to care," Brucker says. "I want people to know that there are resources out there for

them so that they can get the medical help they need."

Brucker created the listing more than a year ago as a resource for the city's homeless who had gathered in Duncan Plaza and he has continued to expand it. The site offers links to maps and directions to each clinic. It also features information about \$4 prescriptions, including a custom search feature that allows users to determine quickly if a drug is available at the discounted rate.

Brucker, who volunteers at the Ozanam Inn homeless shelter in New Orleans, says he learned how important low-cost prescription programs can be when he counseled a man who had been battling a skin infection. The man had seen a doctor who gave him a prescription for an

antibiotic. When the man tried to get the prescription filled, the medicine's \$60 price was out of reach.

He hopes that physicians and patients use the site's search feature to find out if treatments are covered by the \$4 program. "I think it is going to help people afford their care," he says. "If they can't afford the care, they should really let their doctor know."

In recognition for his work in creating the site and volunteering to help the homeless through the student chapter of Tulane Physicians for Social Responsibility, Brucker received a 2009 American Medical Association Foundation Leadership Award in March.

DEDICATED CARE FOR STROKES

Vascular neurologist Dr. Sheryl Martin-Schild has been named director of the Tulane Stroke Program, which provides organized stroke care to diagnose, treat and provide early rehabilitation to stroke patients.

Stroke, which occurs when blood flow to the brain stops or is dramatically reduced, is the third leading cause of death in the United States and the leading cause of adult disability. Louisiana is located in the "Stroke Belt," the region of the United States with the highest incidence of stroke.

Tulane Medical Center patients can be admitted to a dedicated stroke service, including a stroke unit with beds reserved for acute patients. The unit is staffed with nurses and a stroke specialist, as well as a 24-hour, on-call stroke response team that uses specific medical protocols and advanced neuroimaging to provide prompt evaluation, treatment and management of patients with signs of a stroke.

The Tulane Stroke Program also includes a Stroke Prevention Clinic. Appointments at the Tulane Stroke Clinic can be made by calling 504-988-5800 or 800-588-5800.



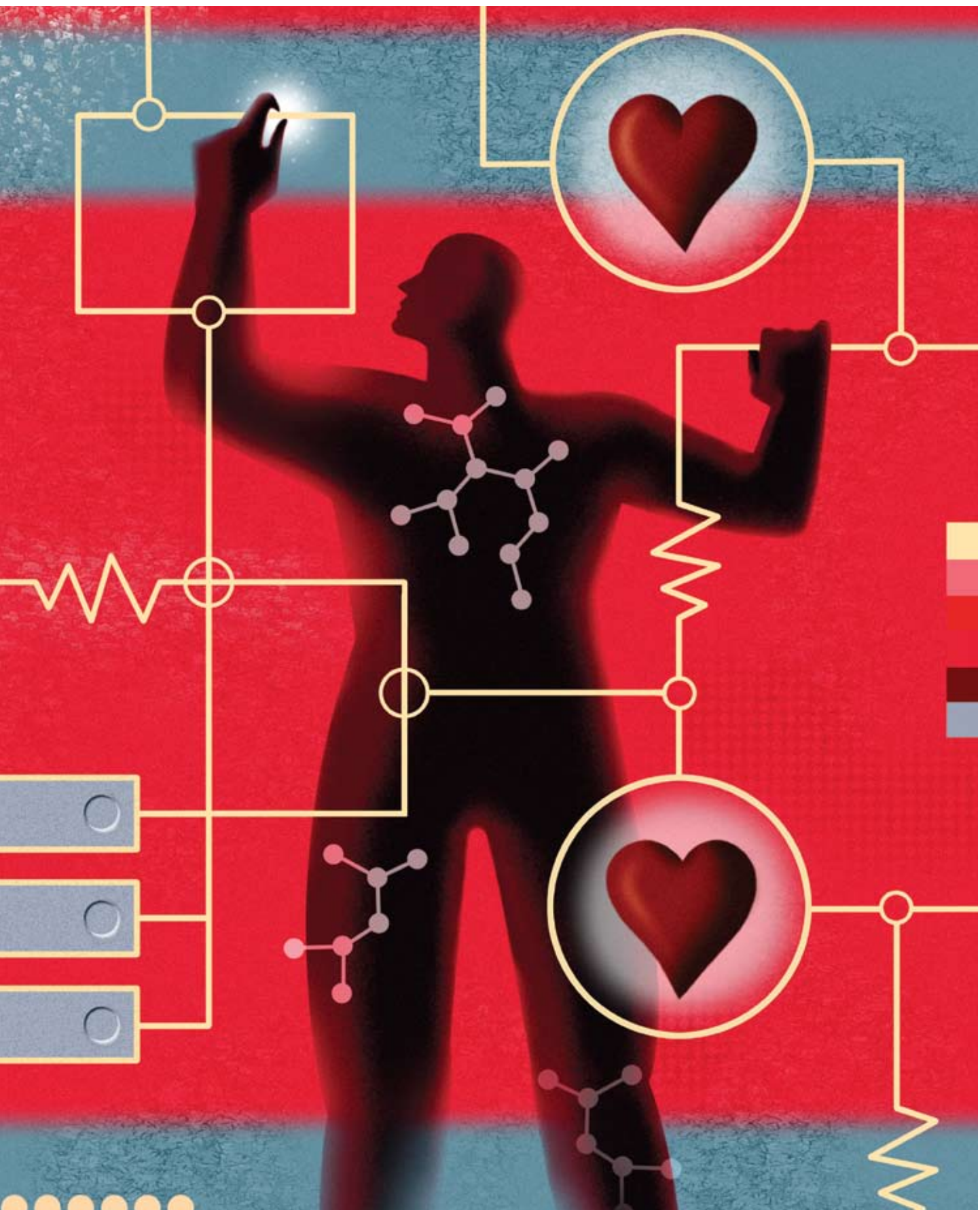
A new Tulane University Heart and Vascular Institute brings many different specialties together to improve patient care, enhance research and support education.

BY KEITH BRANNON • ILLUSTRATION BY STUART BRIERS

Cardio Connections

The statistics are sobering. Louisiana has the fourth-highest incidence of cardiovascular disease-related deaths in the nation. Coronary heart disease is the No. 1 killer of Louisiana residents, accounting for more than 11,000 deaths in 2004, according to the most recent statistics from the state Department of Health and Hospitals. Nationally, heart disease remains the leading cause of death for both men and women.

Recent developments at the Tulane University School of Medicine are designed to fight that enemy more effectively. By uniting primary divisions that care for heart and vascular patients, the new Tulane University Heart and Vascular Institute brings heart surgeons, cardiologists and interventional specialists together to work as a unit to improve patient care, research opportunities and educational practices.



“It is a big change in the sense that we now formally combined into one structure the division of cardiovascular surgery, the division of vascular surgery and the division of cardiology and integrated the clinical, research and education missions of those three entities,” says Dr. Patrice Delafontaine, the institute’s director and chief of the Section of Cardiology.

The institute, formed in July 2008, replaces the Cardiovascular Center of Excellence. In addition to bringing cardiology, cardiovascular surgery and vascular surgery together under one administrative umbrella, it will add interventional radiology to clinical program development. Previously, heart surgeons were grouped under the Department of Surgery with little formal interaction with the cardiologists in the Department of Medicine.

THE POWER OF THE TEAM

Dr. Benjamin Sachs, senior vice president and dean of the School of Medicine, says advances in heart care have prompted educators and teaching hospitals to reexamine the way doctors are trained to meet the shifting needs of patients.

“Medicine is changing rapidly, and patients suffering from cardiovascular disease have many options—they can be treated by a cardiac surgeon, cardiologist or interventional radiologist,” he explains. “However, the training for each specialty is very different and the physicians will have their own strategy to manage the illness. A cardiac surgeon is more likely to perform surgery than a cardiologist who is more likely to provide interventional care, as opposed to a radiologist who may use interventional radiology.

“This isn’t the way patient care should be delivered—it should be performed in a collaborative, team-based approach that benefits the patient.”

The institute offers a broad and comprehensive array of cardiovascular services including advanced interventional cardiology, arrhythmia and atrial fibrillation management, treatment of heart failure and cardiac transplantation, cardiac surgery and peripheral vascular disease management. Cutting-edge diagnostic imaging capabilities, including 64-slice CT angiography, allow for the early detection and prevention of cardiovascular disease and its complications.

THE RIGHT PLACE

“The incidence of cardiovascular disease in New Orleans and Louisiana is among the highest in the nation,” says Delafontaine, citing the state’s increasing rates of obesity, hypertension, diabetes and metabolic syndrome. “That reflects on the number of patients we see at Tulane and the severity of the disease that we see here.”



Dr. Patrice Delafontaine

Hurricane Katrina has made the problem worse. The number of heart attack patients admitted to Tulane Medical Center has tripled since the storm, according to a recent study by Dr. Armand Irimpen, associate professor of clinical medicine, and other cardiologists within the institute. Doctors are also seeing more severe cases of heart disease since the storm as people cope with the effects of chronic stress related to job losses, living in temporary housing or rebuilding their homes. “After a major disaster, people generally tend to neglect their health because they have other priorities,” Irimpen says. “That can lead to serious consequences.”

Doctors within the institute consult regularly to discuss patient cases and treatment strategies. The faculty formally meets each month. Eventually cardiovascular surgeons will physically move their clinical practices from the sixth floor of Tulane Medical Center to the fourth floor where cardiology currently resides and where the cardiovascular imaging center is located.

“We’re actually somewhat innovative in the sense that many universities around the country have started doing something similar—but there is a range of these institutes,” Delafontaine says. Some universities have set up loose collaborations between surgeons and cardiologists while others have established a single, all-encompassing department.

That’s a step Delafontaine doesn’t see happening, as the institute’s faculty appointments will remain in their originating departments. However, the institute will function “for all intents and purposes like a full department,” in terms of research funding, clinical management and curriculum development, he says.

Cardiothoracic surgeon Dr. Michael Weaver says that he has noticed improvements in patient care within the institute’s first six months. “The attendees in the cardiology department are essentially our partners, so we’re getting a heads-up on the patients



THE LURE OF PROCEDURE-RELATED RESEARCH IS A WINNING COLLABORATION FOR BOTH SURGEONS AND CARDIOLOGISTS.



—Dr. Patrice Delafontaine

much more quickly. There is much more coordination between the services because we're all on the same page now," says Weaver, an assistant professor of surgery.

"I'm seeing the patient volumes pick up as we realize that there are opportunities on the surgical side where we need help from the Departments of Medicine or Cardiology, and there are opportunities on the cardiology side where we need surgical help. So we're actually teaching their fellows more."

It's not always easy to get doctors—whose clinical practices may compete for patients—to get on the same page. Among the realities in play are income disparities between specialists and differences in time given to research interests versus clinical priorities. For these reasons, some universities have struggled to form similar institutes, Sachs says.

"Many medical schools have tried to set up institutes like this but have failed because they have had a hard time getting people to work together or to build the economic basis to allow them to work together," Sachs says.

Both Sachs and Delafontaine have worked to make sure all the doctors are on board with the changes and credit their support for making it work. "I think there has been a lot of collegiality and awareness that we really need to be on the cutting edge," Sachs says.

RISING RESEARCH

The institute is expected to increase research funding within specialties, because it can draw from a full range of physicians for everything from testing new device implants to clinical trials for the latest drug therapies.

Delafontaine cites potential trials of implantable cardioverter-defibrillators as an example of new research the institute will attract. Since heart surgeons are also involved in device implantation, the lure of procedure-related research is a winning collaboration for both surgeons and cardiologists, Delafontaine says.

"We have a number of clinical trials that are ongoing. The surgeons now are participating in those, and they were not before," he says.

Delafontaine is a true physician-scientist, balancing laboratory research with clinical work. He has two National Institutes of Health grants totaling \$3.3 million over five years to study insulin-like growth factors and their effect on atherosclerosis and congestive heart failure. Growth factors are proteins that influence the development

and growth of cells in the body. His laboratory research has shown that insulin-like Growth Factor 1 reduces artery-clogging plaque in animals and could help patients suffering a heart attack. He is working to take the research into clinical trials.

The institute has an annual total of \$1.2 million in research funding. It will continue to support ongoing research projects such as the world-renowned Bogalusa Heart Study, a population-based longitudinal study of cardiac risk factors under the direction of Dr. Gerald Berenson, a cardiologist within the institute who works in partnership with Tulane's School of Public Health and Tropical Medicine.

The institute is an area leader in the care of heart attack patients, as well, given that Tulane Medical Center is the only accredited Cycle II Chest Pain Center in the state of Louisiana. That designation is given by the Society of Chest Pain Centers to hospitals that have strict response time standards in treating acute coronary syndrome. The hospital works with area EMS to establish procedures to reduce delays in diagnosing a heart attack and to accelerate treatment. EMS staff alert the hospital's ER and catheterization team from the ambulance, so that everything and everyone can be in place when the patient arrives. Staff can diagnose a heart attack and begin treatment in less than 10 minutes.

Tulane is also a leader in research and correction of atrial fibrillation or irregular heart rhythm. The institute's Dr. John Pigott is the only surgeon in the region to offer minimally invasive Mini-Maze surgery, which involves a series of small incisions in the chest rather than full open-heart surgery. The procedure uses thoracoscopic tools that emit radio frequency energy to burn precise scars in the heart to block the electrical impulses causing the fibrillation. Patients usually leave the hospital on the second day after the operation and can usually go back to work or resume normal activity after a week.

Pigott performs one or more Mini-Maze procedures each week. "Atrial fibrillation is one of the most common heart ailments, affecting roughly 5 million people in the United States," Pigott says. "It's more frequent as we age, so the older you get, the more likely you are to get this."

Pigott plans to take the surgery to the next level by incorporating robotics, which involves even smaller incisions, less discomfort for patients and faster recovery times. He hopes to begin the new procedures within the next six months. ■



Clockwise from left: Fourth-year resident Dr. John Jin, Associate Medical Director of the Tulane Sim Center Dr. Paul Primeaux and fourth-year medical students Natacha Telusca and Jacqueline Magne simulate cardiac procedures in the Center's OR.

Making It Real



Dr. Allen Desena, a third-year pediatric resident, works in the neonatal simulation room.

On the third floor of the Murphy Building in downtown New Orleans, eight patients await medical attention. Two are in obstetrics, just about to undergo difficult deliveries. There's the guy in the OR being prepped for anesthesia and another in the ER with suspected cardiac arrest. Various infants and children are scattered about in examining rooms.

Then there are the pieces and parts—medical students sew up a disembodied arm here, start an IV on another arm there, diagnose “Mr. Hurt Head” under his scary-bad wig and learn ultrasound on a life-sized torso. And 42 web-linked video cameras watch it all as it happens.

Welcome to the latest educational environment for medical students, residents and staff at hospitals throughout the region. A new \$3 million, 14,000-square-foot Tulane Center for Advanced Medical Simulation and Team Training dedicated in January is the site where “learn by doing” meets “first do no harm.”

The high-tech initiative, which uses 14 high-fidelity, life-sized robotic patients and other devices to emulate an entire hospital, also promises significant improvements for patient safety through the use of proven training techniques.

BY DIANA PINCKLEY • PHOTOGRAPHY BY WILL CROCKER

“The center will help Tulane achieve goals in quality and safety, not just for Tulane but for health care locally, regionally and nationally.”

—Dr. Jim Korndorffer



“This is really two centers,” said Dr. Benjamin Sachs, senior vice president of Tulane University and dean of the School of Medicine, during the dedication ceremonies for the facility. “The simulation program teaches medical students, residents, faculty, staff, nurses and allied health professionals how to use the equipment. And it is also a facility for team training through crew resource management.

“The combination of the two makes the Tulane initiative virtually unique.”

The ability to work in teams is key to both the success of healthcare providers and the well-being of their patients, he added. “Health care is no longer one doctor-one patient. Now it’s the team approach, coordinating specialists in allied health care.”

Sachs said that the crew resource management concept was developed by the airlines and the U.S. Department of Defense after miscommunication and lax teamwork led to air fatalities.

Sachs noted that crises commonly faced by airline pilots and physicians have many similarities. “On Jan. 5, the nation was mesmerized by the sight of Capt. Chesley B. “Sully” Sullenberger about to land a plane in the Hudson River,” he said. “Six minutes into the flight, he has to communicate and coordinate all information during a crisis. Are there boats on the river? How close is he to a terminal? His ability to do that—using CRM, communications, and situational awareness—saved 150 people.” Sullenberger is a leader in CRM, introducing the concept and teaching it at US Air.

“In surgery, if you nick an artery and the patient is bleeding, you may have six minutes to coordinate with nursing staff, blood bank, lab, anaesthesiologist—information is coming in from many sources and you have to integrate it as a team to determine the best approach,” said Sachs. “There are some parallels between what Sully did and what surgeons and medical personnel do every day.”

THE TECHNOLOGY OF TRAINING

The third floor of the former Murphy Exploration Building is home to the state-of-the-art equipment. The building at 133 S. Robertson, a block away from Tulane Medical Center, was donated to Tulane in 2007 to support the expansion of the School of Medicine.

The Sim Center, as it’s informally known, replicates a hospital setting, with a fully equipped emergency room, intensive care unit, operating room, clinical exam rooms, hospital patient rooms, nurses’ station and labor and delivery suites to give students, residents, and healthcare providers a real environment in which to learn, practice and master the latest techniques for patient care.

The robotic “patients” can mimic ailments and symptoms hospital staff see daily. The manikins breathe, move their eyes, speak and have a variable pulse and heart rate. They react to doses of medication, receive intravenous therapy and can even go into cardiac arrest—and not come out.

Rooms are loaded with the latest in high-tech gear. In one corner, third-year medical student William Gunderson practiced his technique under the watchful eye of Tulane pulmonologist Dr. Ross Klingsberg. The Sim Center lets students learn how to use instruments in a way to minimize discomfort. Gunderson likened the process to driver’s education. “It lets you drive it way before you take it on the highway.”

The machinery even allows a student to maneuver a little catheter to get tiny forceps through a tube to snip a sample of ulcer that has materialized on a monitor.

In another room, senior medical student Chris Kroner stood at a table where an infant lies. The baby can breathe, cry, moan, cough, hiccup and vomit; it has sites for a feeding tube and an ostomy, and offers opportunities for abdominal surgery. “I wish that I were a first-year student instead of a senior,” he said. “I’m very excited that Tulane is getting this. The manikins can do so many things.”

Dr. Heather Urrego, a second-year ob-gyn resident, exhorted Noelle, a robot so named because “she” was developed in December, to push more to give birth to a robot baby, who comes attached to its own placenta. “Keep pushing, keep pushing,” said Urrego. “The head’s almost there.” The robot baby emerged to a hearty “Congratulations!” from Urrego. An excellent teaching tool, Noelle can be set up for breach and shoulder deliveries.

In a fully equipped operating room, the manikin acts like a real patient, noted Jennifer Calzada, the center’s administrative director. If he doesn’t get oxygen—if the blood gases are not correct—he’ll die. If anesthesia isn’t correct, he’ll struggle, he’ll fight, he’ll die. Sensors inside the manikin measure the gas that’s present—they are calibrated to determine the proper mix—and tell the manikin



Second-year residents Dr. Kelly Rennie (left) and Dr. Marco Hidalgo practice laparoscopic techniques in the Simulation Lab.

how to behave. The manikin is also designed to respond to drugs as a human does. If a team member picks up the wrong syringe and administers the wrong medicine or the wrong dosage level, the “patient” will respond accordingly, thanks to a bar-code reader that determines medicine delivered. Some manikins even have teeth that can break if an intubation is done too forcefully.

The manikins and video cameras are laptop-controlled and Internet-based, in a system that features 25 terabytes of memory—an amount equal to 25,000 gigabytes.

ADDING THE HUMAN ELEMENT

Because people do not learn by simulation alone, the technology is integrated with Tulane’s nationally recognized Standardized Patient Program. Some 100 lay people are trained to act as if they have certain disorders and/or find themselves in certain emotion-laden circumstances.

Dr. James Korndorffer Jr., medical director of the center, gave an example of how training can flow in a seamless manner. “Perhaps an actor—a patient in the doctor’s office area of the center—starts complaining of chest pain. Staff in the doctor’s office get that patient to the emergency department, giving the appropriate responses and working together to get him there in a reasonable amount of time.

“Since actual patients can’t be intubated, we turn it over to the simulators. SimMan is programmed to show the symptoms of a myocardial infarction. The entire team—nurses, physicians, respiratory therapists—works together.”

Next stop for SimMan is the cardiac catheterization lab, where he is identified as someone who needs surgery. He enters the surgery unit, the surgery is performed, and (ideally) he goes to recovery. Then the trainees involved have to explain to the standardized patient—the human—what happened, whether the outcome is good or bad.

Teams are constantly monitored to see how they interact. They watch videos of their work, discuss it with a group facilitator and can review it at home.

Korndorffer explained that individual departments at the School of Medicine may have had a manikin or two to use in training, but the array of manikins and the consequent curriculum opportunities offered by the Sim Center are totally new.

For example, first- and second-year students who want to get comfortable with suturing no longer have to learn to tie knots around a bedpost or practice on a piece of pig’s skin, Korndorffer said. In fact, the human skin-like material featured in the center can be strapped to a standardized patient’s arm under a drape, and the student can learn suturing techniques as they calm a “patient” who may appear belligerent, drunk or otherwise uncooperative.

Any medical school faculty member can use the center as a teaching tool, Korndorffer said, noting that early adopters have included the departments of surgery, anesthesia, ob-gyn, pediatrics, cardiology, gastroenterology, pharmacology and physiology.

TAKING “TEAMSTEPS” FOR PATIENT SAFETY

“It’s easy to be wowed by technology in the simulation center, and one should be,” said Dr. Kevin Krane, vice dean for academic affairs and a professor of medicine. “We’ll be able to train people in a simulated way to use their skills before they get to real people—it’s a huge advantage for safety.

“And when you pair simulated training skills with a team-based training safety approach, you get increased bang for the buck. The combination improves patient safety through the development of both technical skills and interpersonal communication.”

Krane heads the team-based training aspect of the center, which relies on an approach called TeamSTEPPS™. Especially designed for healthcare professionals, TeamSTEPPS emphasizes training in

leadership, communication, situation monitoring and mutual support to enhance performance, knowledge and attitudes.

“The entire program is based on getting healthcare professionals across disciplines to work as a unit with a focus in providing the best possible care—and the safest care—for the patient,” Krane said. “The purpose is to put everybody on the same page, and to empower those who may be the lowest-ranking on the totem pole to develop skills that allow them to interact effectively with those who may be much higher up.”

Team leaders must assure all roles are clear—and information is communicated effectively. The teams are recorded during their training sessions and then review the video and debrief. “That’s actually one of the most powerful opportunities to assess and give feedback,” said Krane. “We can reinforce good behaviors and point out behaviors that may not be as effective.”

The video gives unequivocal evidence of what was and wasn’t done. And because it is Web-based, participants can have the opportunity to review the footage and think about it so the next time they can do it better.



“We want students to understand that if they are good team players, their patients will receive better care.”

—Dr. Kevin Krane, vice dean for academic affairs

EMPOWERING STUDENTS

The center promises to change medical education, too. The focus, again, is on teamwork. “Within the context of basic science courses, the value of working in teams is emphasized from day one,” Krane said. “We want students to understand that if they are good team players, their patients will receive better care, and we want Tulane to be recognized as an institution where we are creating future physicians who understand the importance of teams.”

Krane teaches a TeamSTEPPS seminar involving Tulane medical students, Xavier pharmacy students, and Our Lady of the Lake nursing students. “Medical students love it, but pharmacy and nursing students really enjoy the opportunity,” he said. “The goal is to get everyone to see they’re all on the same level. The MD is no more important than the pharmacist or the RN when it comes to looking after the patient. There are ways that each can learn tools and methods to improve what they’re doing to look after patients.”

He is also carrying out an educational research project to measure the impact of putting such a group together using the Sim Center environment and will present his data at a national meeting in Canada this summer.

Center leaders envision a broad role for its training—for hospital teams in the region, as part of medical conferences that meet in New Orleans and in outreach to Latin America.

“If you look around the country, I would put our simulation center up there as one of the nicer ones you’d find anywhere, both in terms of its size, what it has to offer and the variety of different simulations all located within one center,” said Krane. “And because the center offers opportunities in pediatrics, obstetrics, emergency medicine and acute-care medicine, we can work with health care teams from essentially all disciplines.”

Korndorffer added, “The center will help Tulane achieve these goals of healthcare quality and safety, not just for Tulane but for health care locally, regionally and nationally—and not just for physicians, but for all healthcare professionals: physicians, nurses, pharmacists and technicians.”

Calzada, the center’s administrative director, noted that popular offerings include team training sessions for Laerdal’s Rapid Response, office emergencies, airway management and various needs of hospital units and doctors’ offices.

The initial reviews border on raves. “Our students are pretty wide-eyed,” said Krane. “It’s actually very exciting for them. They see dramatic progress in the direction the school’s going. It’s clear that this is something that’s really going to enhance their education. The first question they ask is ‘When do we get to use it?’”

To discuss a customized training and education plan to meet the needs of your healthcare system, contact Jennifer Calzada, administrative director for the center, at 504-988-9150.

This Notice is being published pursuant to Order of the
Civil District Court for the Parish of Orleans.



**IF A CLOSE FAMILY MEMBER DONATED THEIR BODY TO THE TULANE UNIVERSITY WILLED BODY PROGRAM
AT ANY TIME FROM JANUARY 1, 1994 TO MARCH 31, 2004
AND YOU ALLEGE YOU HAVE SUFFERED DAMAGES FROM THE ACTS OR OMISSIONS
OF DEFENDANTS IN THIS CASE**

A CLASS ACTION MAY AFFECT YOUR RIGHTS

There is pending class action lawsuit involving certain close family members of individuals who donated their body to the Tulane University Willed Body Program. The name of the lawsuit is *Rose Goudeau, et al. vs. The Administrators of the Tulane Educational Fund, et al.*, No. 2004-04758. The case is pending in the Civil District Court for the Parish of Orleans, State of Louisiana.

This Notice is only a summary. For complete information, you should read the complete Notice form available by visiting the website www.tulanewilledbodyprogramclassaction.com, or call, toll free, 1-866-467-1400 to obtain a Notice form.

What is the Lawsuit About?

The defendants in this lawsuit are The Administrators of the Tulane Educational Fund, d/b/a The Tulane University of Louisiana, d/b/a The Tulane University School of Medicine, Mary Bitner Anderson, individually and in her capacity as Director of the Tulane Willed Body Program, and National Anatomical Service, Inc.

The lawsuit alleges that Tulane University falsely claimed that it had an urgent need for donated bodies and thereby obtained, on a yearly basis, many more donated bodies than it needed to train medical students.

The lawsuit further alleges that Tulane ignored and/or exceeded the authorizations granted to Tulane by the donors by selling the bodies (and/or body parts) that were not needed to train medical students at Tulane to third parties, such as Defendant, National Anatomical Service, Inc., which in turn, sold the bodies (and/or body parts) to other entities, including, but not limited to, the United States Army.

The lawsuit further alleges that Tulane ignored and/or exceeded the authorizations granted to Tulane by the donors in numerous respects, including, but not limited to failing to contemporaneously track and approve the entities that ultimately received and actually used the bodies as well as failing to contemporaneously track and approve the actual uses to which the bodies were put.

The lawsuit further alleges that Tulane and National Anatomical Service, Inc.'s various acts and omissions in handling the bodies that had been donated to Tulane constitute an unauthorized mutilation, desecration, and/or mishandling of those bodies, causing emotional distress to the surviving family members of the donors for which the Plaintiffs seek to recover monetary damages against the Defendants.

Each and every defendant denies all the allegations.

The Court has not made a decision about the allegations. The Court has only decided that the case can move forward as a class action.

Who is affected?

The Class is those individuals whose close family members donated their body to Tulane Willed Body Program, and the succession representatives or executors or administrators of the estates of persons who donated their body to the Tulane Willed Body Program at any time since January 1, 1994 to March 31, 2004 and who allege that they have been damaged by the acts or omissions of the defendants in this case. The class specifically includes those persons whose deceased mother, father, grandfather, grandmother, brother, sister, son, daughter, and/or grandchild, including step-relatives, donated their body to the Tulane Willed Body Program.

What Are My Legal Rights?

You have a choice of whether to stay in the Class or not, and **you must decide this now.**

Remain in the Class

You do not have to do anything to remain the Class. However, if you stay in the Class, you will be bound by any decision in this lawsuit. You won't be able to bring your own separate lawsuit against the defendants in this lawsuit for the same claims that are the subject of this lawsuit now or in the future. If benefits become available in the future, you will be notified about how to participate in any benefits that may be obtained. You may be required to take further action to participate in any class recovery.

Exclude Yourself from the Class

If you do not want to remain in the Class, you must exclude yourself from the Class in a writing that is **postmarked on or before June 1, 2009**. An Opt-Out Election Form may be found on the web site identified below. If you exclude yourself, you cannot get any money or benefits from this lawsuit if they are awarded. However, you will keep the right to bring your own separate lawsuit against the defendants in this case for these claims, and you will not be bound by any orders or judgments of the Court.

Who Represents the Class?

The Court has appointed attorneys to represent the Class. These lawyers are called Class Counsel. You will not be charged personally for these lawyers, but they will ask the Court to award them a fee that will be paid from any award or recovery that may be established in the lawsuit. You may hire your own attorney, if you wish. However, you will be responsible for that attorney's fees and expenses.



A World OF PROTECTION

Tulane infectious disease researchers are exploring safe, cost-effective ways to deliver vaccines—in banana chips, with a swipe of paste on skin or through mucosal membranes.

BY DIANA PINCKLEY • PHOTO ILLUSTRATION BY WILL CROCKER

HOW TO FIGHT THE INFECTIOUS DISEASES THAT KILL 17 million people, including 9 million children, worldwide every year? Dr. John Clements wants to prevent those diseases from happening in the first place, and perhaps do away with the vaccination needle while he's at it.

Vaccine developers face a number of challenges, including the emergence of new diseases, re-emergence of old diseases, drug resistance, an aging adult population and, more recently, bioterrorism. Clements and his colleagues are working on novel vaccine strategies to overcome these challenges, including the use of plants as vaccine delivery systems, nanocarriers and mucosal immunization. All of these strategies are designed to deliver inexpensive, needle-free vaccines.

Vaccine systems can be introduced into plants. When the plants are simply consumed, they form an edible vaccine. "The cost of growing a banana in Honduras, for example, is three cents," says Clements, professor and chairman of microbiology and immunology at Tulane University School of Medicine. "We can engineer 10 vaccine doses into one banana, cut it up, and make banana chips, and now you have a vaccine for people, particularly children, who live in developing countries."

Or, thanks to nanocarriers, vaccines can come in a tube, just like toothpaste. "As we envision the application of this technology, all you would have to do is make a dime-sized spot on each child's arm," says Clements, explaining that the nanocarriers allow the vaccine to be absorbed through the skin. "There are no needles, and no trained health-care providers are required. It's low-cost. For around \$2 a tube, you can immunize an entire village."

Clements and his Tulane colleagues are also working with vaccines delivered through mucus membranes—by nose, by mouth or even rectally. That's particularly interesting, he explains, given the route of most diseases.

“A

s it turns out, about 95 percent of all pathogens that infect us start on mucosal surfaces—your nose, your gastrointestinal tract, your genitourinary tract,” Clements says. “When they first make contact with that mucosal surface, they either colonize the membrane or cross it to cause infections and disease. Traditional vaccines don’t protect from infection, but instead prevent the infection from progressing to disease. Mucosal vaccines can actually prevent the pathogens from getting inside the body to start with.”

Clements and other Tulane researchers also focus on substances that make vaccines work. Those substances, called adjuvants, enhance the response to antigens, the primary vaccine component. Clements explains that without the adjuvant, the body tends to ignore vaccines made of killed viruses or bacteria or small parts of those microorganisms, the most common formulations for vaccines. “You can control the outcome, the direction of the immune response, by selecting the adjuvant that you use,” he says. “The adjuvants that we work with and have developed have a number of unusual properties that make them unique.”

Research in infectious diseases is a long-standing Tulane tradition. “It’s the thing the university was built on,” says Clements, vice dean of research who has been at the School of Medicine for 26 years. “Tulane University began because of cholera and yellow fever and malaria here in Louisiana. It’s in our blood, so to speak. We are internationally known for research in many areas, but we are internationally known best for our research in infectious diseases.”

Clements points out that infectious disease research involves some 40 faculty members across multiple disciplines on different Tulane campuses and accounts for about half the university’s sponsored project funding each year.

“We have a significant effort in HIV investigation, a significant effort in diarrheal diseases—cholera, E. coli, Salmonella and Shigella; and significant investigations in tropical diseases—dengue, malaria, hemorrhagic fever viruses. We have a large program in viruses that cause cancer and viruses that cross the placenta to damage developing fetuses. We have initiatives in specific biothreat agents including anthrax and plague and monkey-pox and avian influenza, and different toxins that are used as biothreat agents.”

That work provides a strong foundation for two relatively new initiatives—the Louisiana Vaccine Center and the South Louisiana Institute of Infectious Disease Research. Both are collaborations between Tulane and LSU Health Sciences Center, with a Xavier University partnership in the Vaccine Center.

Clements is currently director of the South Louisiana Institute for Infectious Disease Research, founded in 2007 with \$3.3 million from the state of Louisiana to build on research strengths in fungal diseases, HIV/SIV, sexually transmitted diseases, vaccines/vaccine development, respiratory diseases, oral diseases and biodefense/emerging infections. It includes a training program for those who want to pursue careers in academic research labs and/or the biotech industry and a commercialization component to translate its findings into day-to-day use.

He co-directs the Louisiana Vaccine Center, also established in 2007 with \$5.5 million from the Louisiana Board of Regents to coordinate vaccine development and capitalize on research achievements in infectious diseases and vaccines. “Between LSU, Tulane and Xavier, the combination of infectious disease researchers cannot be beaten,” Clements says. “Investigators in New Orleans have earned an international reputation for research achievement in infectious diseases, particularly in the related areas of microbial pathogenesis, host immunity and vaccine research. We have indicated to the state that within three years we will provide the synergies for investigators to work together and create new discoveries in vaccines and vaccine development. Now we have the tools to answer the really important questions.”

The goal at the base of those questions is a very practical one: to develop vaccines that are easy to manufacture, transportable, stable without refrigeration, easy to





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**Tulane University
began because of
cholera and yellow fever
and malaria here
in Louisiana.**

Infectious disease research

is in our blood.

”

—Dr. John Clements

administer, effective, affordable and safe. “That’s really the challenge that we’ve taken on here in our laboratories,” says Clements. “And I’ll tell you—it’s a great job. It’s one of those jobs where you can’t wait to come to work every morning.”

The odds against developing an effective vaccine are long; about 95 percent of those tested fail for one reason or another. The timeline and budget requisites are also daunting—20 years and about \$1.2 billion in most cases. And the cost of an individual vaccination can be prohibitive. Clements cites one vaccine, now withdrawn from the market, that sold for \$90: “At \$90 for a three-dose regimen, the 600,000 babies who die every year from this diarrheal disease are still going to die, because they live in areas of the world where the average healthcare expenditure is less than \$5 per person per year.” Fortunately, that vaccine has been replaced with two new vaccines, both of which are effective but still too expensive for use in developing countries.

“Our primary focus is vaccines which have a low cost for delivery, especially to children, and to people who live in developing countries. That’s why we use nanocarriers as delivery formulations. That’s why edible vaccines and mucosal vaccines are so appealing to us. They break the delivery chain, and they put control into local hands.”

The mucosal vaccines, Clements predicts, are just a few years away from widespread use; the nanocarriers perhaps five to seven years away. And he’s convinced the Tulane vaccine developments will be among the 5 percent that are successful because “they work, they’re safe and they’re inexpensive.” Of these three issues, he says, safety is the most important.

What keeps him going? “I do these things because it’s important to me to make a difference. I love this story about a young girl standing on a beach where hundreds of starfish have washed ashore, and she’s throwing them back in the water one at a time. A guy walks down the beach and says, ‘You know, that’s really not going to make any difference,’ and she says, ‘It is to this one.’ Well, I don’t want to throw them back in one at a time. I want to stop them from washing ashore to start with.

“Vaccinology is one of the few fields where you can actually say you have touched the lives of millions of people. And it’s not just their lives—it’s also the lives of their children and generations to follow.

“Who wouldn’t want to do this?” 🇺🇸

WORLD-RENOWNED CARDIOLOGIST DR. ELIAS S. HANNA ('63) has earned acclaim for his expertise and innovations in open heart surgery. Now, with the establishment of the Elias S. Hanna MD, Cardiovascular Foundation Chair at Tulane University School of Medicine, the San Francisco physician will change pediatric care on the Gulf Coast.

Calling Hanna "a giant," Tulane President Scott Cowen said, "His determination to ensure that the School of Medicine remains at the forefront of the very best cardiac care led him to make an exceptional gift that will sustain generations of top surgeons at Tulane."

Linda Wilson, president emeritus of Radcliffe College who serves with Hanna on the Tulane Board of Administrators, said: "Elias enrolled at the Tulane medical school as a work-study student and has really never stopped working on Tulane's behalf. Now he gives not just his skill as a surgeon to the world, but also provides the means for others to follow in his distinguished footsteps."

Hanna was trained by legendary surgeon and Tulane alumnus Dr. Michael DeBakey. In 1970 at a field

hospital in Saigon, Hanna extracted a machine-gun bullet from the heart of a wounded soldier, without the machinery used today to recirculate a patient's blood. Hanna's procedure, a medical first completed in just over an hour, was acclaimed for its speed and precision. And it showed that open-heart surgery could be accomplished without transfusion.

Hanna is founder and president of the Elias S. Hanna, MD, Cardiovascular Foundation, which dispatches volunteer teams of cardiac surgeons to teach the latest open-heart techniques to physicians around the world. He has established cardiac surgery units in Syria, Iraq, China, Sri Lanka, Taiwan and the Philippines.

The first holder of the Hanna chair is Dr. Thomas Yeh, Jr., director of both the Tulane Pediatric Heart Center and

the Chest Wall Center, which uses minimally invasive approaches to correct chest wall defects in children.

"Our rapidly growing team of skilled professionals will be our longest and strongest suit," Yeh said, adding that a state-of-the-art Pediatric Heart Center is in the works. "Dr. Hanna's gift, quite simply, makes this mission possible."



SEND NEWS ! Tulane Medicine seeks news and notes about alumni of the medical school, as well as faculty members and "alumni" of the Tulane Residency programs. Please send your news to mednotes@tulane.edu.

■ DEAN TO WATCH

Senior vice president and dean of Tulane University School of Medicine **Dr. Benjamin P. Sachs** was chosen one of the "People to Watch" in the September issue of *New Orleans Magazine*. Sachs came to Tulane in November 2007 from Harvard Medical School.



'45 Dr. Gerald Berenson (A&S '43), clinical professor of cardiology and pediatric cardiology in the Tulane School of Medicine and research professor of epidemiology in the School of Public Health and Tropical Medicine, was one of only 13 researchers from throughout the country to be selected as a 2008 Distinguished Scientist by the American Heart Association. This distinction is bestowed upon prominent members of the association whose work has advanced the understanding and management of cardiovascular disease and stroke. The director of the Tulane Center for Cardiovascular Health, Berenson has led the Bogalusa Heart Study for the past 34 years. This long-term study involving thousands of children in rural Louisiana has provided encyclopedic data on the early natural history of arteriosclerosis and hypertension, and has developed strategies to aggressively address modifiable risk factors for cardiovascular disease and stroke.

'49 Dr. Jonnie McLeod, a pediatrician in Charlotte, received the 2008 E. Harvey Estes, MD, Physician Community Service Award from the North Carolina Medical Society. McLeod, a former chair of the North Carolina Drug Commission, helped establish the McLeod Addictive Disease Center, the largest comprehensive addictive disease treatment center in the state. The award recognizes her tireless volunteer leadership: "From sex education to drug treatment to AIDS prevention to assistance to impaired physicians, her common thread has been her commitment to helping people live more productive, happier lives."

'53 Dr. Richard M. Nunnally was one of 11 recipients of the 2008 College of American Pathologists Lifetime Achievement Award. He is president of Pathology Laboratory Consultants (APMC) and director emeritus of Pathology and Nuclear Medicine Laboratories at Our Lady of the Lake Regional Medical Center in Baton Rouge, La.

'57 Dr. Max Cooper and his wife Rosalie Lazzara Cooper have endowed the annual Lillie and Bennie Lazzara Lecture to alternate between the departments of microbiology/immunology and cardiology. The gift honors Mrs. Cooper's parents, Lilly and Bennie Lazzara. Her brother, **Dr. Ralph Lazzara (M '59)** is a cardiologist. The first Lillie and Bennie Lazzara Lecture, "Climate, Oceans, Infectious Diseases and Human Health: Cholera as the Paradigm", was presented in December by Rita R. Colwell, former director of the National Science Foundation.

Dr. Cooper joined Emory School of Medicine in 2008 as a Georgia Research Alliance Eminent Scholar and professor of pathology and laboratory medicine. He

■ INNOVATION PRIZE Tulane's Peptide Research Lab and its research work in HIV are among 50 organizations, companies and individuals chosen as 2008 Innovator of the Year honorees by *New Orleans CityBusiness* for continuing to "keep the New Orleans area a center for creativity."

also holds appointments as professor at the Emory Vaccine Center and the Emory Center for AIDS Research in the Rollins School of Public Health. He received the Association of American Medical Colleges 2008 Award for Distinguished Research in the Biomedical Sciences, recognizing outstanding clinical or laboratory research by a medical school faculty member.

'62 Dr. Ferdinand Dietze, the husband of the late Henryetta Greenslit Dietze (N '55), recently married Elinor Devereux Finley (N '55). The couple resides in Breckenridge, Colo. and Point Clear, Ala.

'63 Dr. James H. Larose (A&S '60) received the Ira L. Myers Service Award from the Medical Association of the state of Alabama for lifetime service to the medical profession. Larose helped found the American College of Nuclear

Physicians and chaired the organization's House of Delegates from 1985–87. He has published nine medical textbook chapters and more than 40 papers. Active in his community, he has chaired the board of Seton Haven Retirement Home, commanded the Veterans of Foreign Wars and the Sons of Confederate Veterans, and chaired the Menewa District of the Boy Scouts of America since 1999.

'67 Dr. Robert Wiebe received a Pioneer Award from the Tennessee Emergency Medical Services for Children Foundation in December 2008. The award recognizes Wiebe's long-standing service to the life-saving needs of children and his tireless support of the principles of the national Emergency Medical Services for Children program. Wiebe is a professor of pediatrics and emergency medicine at University of Texas Southwestern Medical Center.



Dr. Antonio Barrios, who heads International Medical Programs at Tulane, was an organizer of three recent Latin American symposia: an annual ENT Congress in El Salvador where all faculty for the event were Tulane physicians; El Salvador's

International Symposium in Urology, which featured as sole faculty members **Dr. Raju Thomas** and **Dr. Benjamin Lee** of Tulane's Urology Department; and the annual Tulane-San Fernando Hospital International Medical Meeting in Panama.

'71 Dr. Jerome S. Blackman is on the board of the China American Psychoanalytic Alliance. He has been teaching a weekly course on developmental conflicts via videoconferencing to the faculty of the Shanghai Mental Health Center since September 2008, and was a visiting lecturer in March at Beijing University, East China Normal University and Shanghai Medical School. Blackman presented a paper, "Multimodal Psychoanalytic Diagnosis," at the World Psychiatric Association meeting in Florence, Italy, in April. Blackman's second book, *Get the Diagnosis Right: How to Assess Emotional Disturbances and Select the Correct Treatment*, is published by Routledge in May. His first book, *101 Defenses: How the Mind Shields Itself*, has been in print since 2004. Blackman is professor of clinical psychiatry at Eastern Virginia Medical School in Norfolk, Va., and training and supervising analyst with the New York Freudian Society Psychoanalytic Training Center in Washington, D.C., as well as secretary-general of the American College of Psychoanalysts.

Dr. Gerald F. Joseph, Jr., was elected president-elect of the American College of Obstetricians and Gynecologists. He is a senior consultant in gynecology at Ochsner Health Center in Covington, La.

'73 Dr. Joe Horton has been professor and chief of interventional neuroradiology at the University of Alabama at Birmingham since 1999. He

■ HEALTH-CARE HEROES *New Orleans CityBusiness* has named its Health Care Heroes Class of 2009, recognizing 50 top professionals in the state's health care industry based on professional and community achievement. Among Tulane School of Medicine affiliates included are: **Dr. Frank DellaCroce** and **Dr. Scott Sullivan**, clinical instructors of plastic surgery; **Dr. Sander Florman**, associate professor of transplantation surgery; **Robert Gardner**, patient navigator at the Patricia Trost Friedler Cancer Counseling Center; **Dr. Timothy Harlan**, assistant professor of clinical medicine and associate chief of outpatient programs; and **Dr. Geoffrey Nagle**, associate professor of psychiatry and neurology and director, Tulane University Institute of Infant and Early Childhood Mental Health.

is cofounder of Micrus Endovascular, a company that makes medical devices that are implanted in the head to treat intracranial aneurysms. He also has endowed a pair of charitable remainder trusts to start a pair of organic chemistry fellowships at MIT, where he earned his undergraduate degree and which he terms his "scientific alma mater." His son, Charles, completed his anesthesia residency in June and is now on staff at University of Pittsburgh

'77 Dr. Kenneth G. Nix is internal medicine program director, associate dean of the Mayo School of Graduate Medical Education, and vice chair of the Department of Medicine at the Mayo Clinic in Jacksonville, Fla. He was named a Mayo Distinguished Educator in 2001. His son, David, is a Fulbright fellow at Tohoku University in Sendai, Japan, studying the origins and trajectory of contemporary Japanese sustainable architecture. His daughter, Elizabeth, is a veterinarian in Atlanta.

'78 Dr. Emmett B. Chapital, Jr. (MBA '96), was honored at the end of August by the Young Leadership Council in New Orleans as one of its 25 "2008 Role Models." He also received the Distinguished Service Award in October from St. Augustine High School in New Orleans.

'80 Dr. Mary P. Lupo (N '76), clinical professor of dermatology at Tulane, has been elected to the board of directors of the American Society for Dermatologic Surgery.

'80 Dr. Ian Thompson has been appointed chair of the genito-urinary committee and the urologic cancer outreach program of the Southwest Oncology Group. Thompson is professor and chair of urology at the University of Texas Health Science Center in San Antonio. For 20 years, he has been a

■ BEST WORKPLACES In the spring issue of *Nursing Professionals* magazine, Tulane Medical Center made the "2009 Top 100 Hospitals to Work For" list, based on a national survey of hospital nurses. Early in 2008, the magazine surveyed 25,000 randomly selected hospital nurses measuring their job satisfaction. The questions covered areas including how hospitals manage personal training and development, whether they are family-friendly employers, if they offer flexible working arrangements and if they promote equality and diversity.



Dr. Thomas H. Grimstad (M '73), right, president and chief executive officer of the Louisiana Medical Mutual Insurance Company (LAMMICO), presented a commemorative plaque to LAMMICO scholarship winner **Philip G. Schmalz**, a first-year student at the Tulane University School of

Medicine. Schmalz is one of four Louisiana medical students who received merit scholarships from LAMMICO, Louisiana's largest provider of medical malpractice insurance.

A native of New Orleans and a graduate of Country Day High School in Metairie, Schmalz completed his undergraduate studies at the College of Charleston, where he majored in biology and minored in chemistry. After graduating from college in May 2007, Schmalz has worked full-time at the Broad Institute, a research collaboration of the Massachusetts Institute of Technology, Harvard University and affiliated hospitals. As a research assistant there, Schmalz was introduced to genomic medicine, a relatively new area of research that hopes to discover the molecular basis of human disease.

■ **TOP DOCS** *New Orleans Magazine*, in its August issue, included 80 Tulane Medical Center physicians on its "best" list. In addition, the magazine featured **Dr. Paul Friedlander**, clinical associate professor and chair of otolaryngology, on its cover and profiled **Dr. James McKinnie**, associate professor of clinical medicine, in the cardiology section of the Department of Medicine.

part of the Southwest Oncology Group, leading a prostate cancer chemo-prevention study to reduce cancer risk in men.

'96 Dr. Howard Jeffries (PH '96), was appointed medical director for the continuous performance improvement program at Seattle Children's Hospital, where he is working with a team to increase physician engagement with the program, educate physicians on

continuous performance improvement principles and direct clinical practice projects. Jeffries, an associate professor of pediatrics at the University of Washington School of Medicine, is an attending physician in the cardiac intensive care unit at the hospital, and he has served as director of quality improvement for the pediatric and cardiac intensive care units since joining the faculty in 2004.

In Memoriam

- '40 Dr. Bernard Kaufman, Jr.
- '41 Dr. Robert R. Gatling
Dr. James F. Gladney, Jr.
- '44 Dr. Samuel D. Austin
Dr. Wendell B. Holmes
- '45 Dr. Joseph D. Calhoun
Dr. Nathan F. Troum
- '50 Dr. Walter H. Brent, Jr.
Dr. Robert P. Foster
Dr. Wayne Shepard
- '51 Dr. Joseph L. Akerman
Dr. Upton W. Giles, Jr.
Dr. Charles E. Selah
- '53 Dr. Philip R. Loria
- '54 Dr. Avery L. Cook
- '56 Dr. Betty Morphy Oliveira
Dr. William F. Zuber, Sr.
- '57 Dr. John T. Butler
Dr. S. Dale Coker
- '60 Dr. Christopher D. Burda
Dr. Roberto Stambulie
- '61 Dr. Sydney S. Schochet, Jr.
- '64 Dr. William R. Healy
- '65 Dr. Judith A. Harris
- '66 Dr. Lee B. Bloom
- '70 Dr. Gerald M. Baur
- '80 Dr. Roger J. Ferland

Dr. Gordon L. Blundell, Jr. (A&S '76, M '80) was incorrectly listed in "In Memoriam" in the fall 2008 issue of Tulane Medicine. He lives in Mandeville, La.



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