

THE MAGAZINE OF TULANE UNIVERSITY SCHOOL OF MEDICINE | SPRING 2008

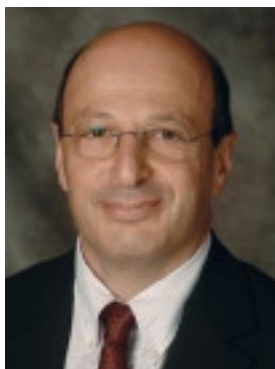
TULANE | MEDICINE



**DEAN BEN SACHS
HEADS MEDICINE**

**REACHING OUT:
A MODEL CLINIC**

**GROWING LIVERS,
SAVING LIVES**



Welcome to a revived
Tulane Medicine
magazine. Twice a year,
Tulane Medicine will deliver news of

developments at the School of Medicine and Tulane Medical Center.

As many of you may know, I am new to the deanship and the city. Thus I have started to keep a diary of my experiences in New Orleans. Here is an excerpt from it:

"Signs of hope can be seen everywhere. There is a quiet but powerful revolution going on in this city. This year our medical school received 8,300 applications for 175 places. Pre-Katrina there were 6,800 applicants; this is a large increase especially considering that nationally fewer students are applying to medical school (based on 2006-7). Young people, wonderful young people with spirit, are being attracted to New Orleans for the opportunity to make a difference. Tulane is the only research university in America that requires public service as a requirement for graduation. I am really proud of our medical students.

"The scientists, physicians, nurses and technicians—men and women who returned after the storm to rebuild—are truly people of courage. Not only do they have to contend with ongoing personal challenges, but they also have to help rebuild our university and city. I have huge respect for them. Most days I shine a virtual mirror at them and say, 'Look what you have achieved in the last two years. Did you know you had it in you? Imagine what we can build for tomorrow.'"

It is a privilege to be a member of the Tulane family.

Benjamin P. Sachs, M.B., B.S., DPH, FACOG
Senior Vice President of Tulane University
Dean of the School of Medicine

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VOLUME 34, ISSUE 1 2008

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Tulane Medicine magazine is published semiannually for Tulane University School of Medicine alumni, faculty, residents, students, staff and friends.

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Published letters and comments
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TULANE | MEDICINE

FEATURES

6

REACHING OUT

Faculty, residents and students offer “medical homes” through community clinics. They may be the new face of American medicine.



10

FULL SPEED AHEAD

Addressing the challenge and promise of medical education in post-Katrina New Orleans is a mission that requires more than a sprint. Dean Ben Sachs is ready.



15

NEW ORGANS, NEW LIVES

Under the skilled care of Tulane’s abdominal transplant specialists, just one sliver from a liver can grow to save the life of a child.

DEPARTMENTS

2

NEWS

- Tulane Center for Aging
- Murphy Oil Gives Building
- Studying ‘Katrina Cough’
- Disaster Communications
- Promoting Heart Health for Kids
- Support for Renal/Hypertension Studies

18

NOTES

- News about Alumni
- Dr. Doty Keeps His Promise
- Congress Honors Dr. DeBakey
- New Auditorium Named for Alumna

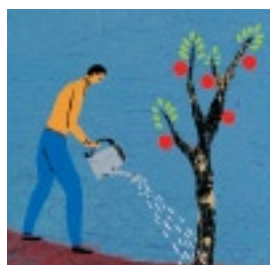
21

STAT

Some School of Medicine facts you probably didn’t know.

ON THE COVER

Dr. Benjamin Sachs, an acclaimed obstetrician with extensive experience in academic medicine and management, brings a new vision to the School of Medicine deanship. Photography: Will Crocker



“
**WE WANT TO RETAIN
 PHYSICAL AND
 COGNITIVE FUNCTION
 UNTIL THE VERY
 END.**
 ”

—*Dr. Michal Jazwinski*

AGING GRACEFULLY

A new Tulane Center for Aging aims to engage departments and disciplines throughout the university in a lively dialogue on all aspects of aging, to enhance existing programs and to develop new ones.

Dr. S. Michal Jazwinski, a professor of medicine who is spearheading the center’s establishment, says the goal is to enhance the later years of life. Its initiatives will range from basic medical research to innovations in the ways that society and communities can accommodate and improve the conditions of old age, says Jazwinski.

He approaches aging from a medical researcher’s perspective. “I’m specifically a geneticist, so I’ve been studying the biology of aging for some 20 years,” he says.

Taking a molecular and a genetic approach, Jazwinski developed a simple model of aging using baker’s yeast. “As it turns out, yeast presents a very simple, stripped-down version of aging,” Jazwinski says. “When you are modeling something experimentally, you want to make it as simple as possible. Then it is relatively easy to design experiments that yield answers.”

Jazwinski hopes that the Tulane Center for Aging will encourage more collaborations between different disciplines—for example, between biologists and mathematicians—that will yield insights and new concepts to bridge the gap between the simple models of research and the dauntingly complex nature of whole, living organisms. At present, the center has approximately 20 members, mostly at the medical school, each with an active interest in service to the elderly.



Dr. Michal Jazwinski involves many disciplines in the study of aging through a new center.



Dr. Luis Gabriel Navar with colleagues: The Hypertension and Renal Center of Excellence boosts knowledge as it helps junior faculty compete for grants.

NURTURING RENAL AND HYPERTENSION RESEARCH

The Tulane University Hypertension and Renal Center of Excellence has received a five-year grant of more than \$11 million from the National Center for Research Resources of the National Institutes of Health (NIH) to continue its pioneering research on high blood pressure and its effect on the kidneys, as well as the role of kidneys in the development of high blood pressure.

With hypertension, or high blood pressure, affecting the health of millions of Americans, the center's research is vital to finding ways to combat this disease.

The center supports research projects of junior faculty investigators and strengthens biomedical research capacity and facilities to enable key research in hypertensive renal and cardiovascular diseases.

"We will continue to provide a rich mentoring environment for junior faculty investigators so they can develop and compete nationally as researchers," says Dr. Luis Gabriel Navar, professor of physiology and co-director of the center. "This program gives junior faculty an opportunity to generate preliminary data and compete successfully for their own research grants."

Dr. Lee Hamm, professor of internal

medicine and executive vice dean of the School of Medicine, co-directs the Hypertension and Renal Center of Excellence.

The NIH grant will support research from physiology, medicine and pediatrics in the School of Medicine, and from epidemiology in the School of Public Health and Tropical Medicine.

Projects slated for the period include studies of factors affecting kidney development in newborns; impacts of diet changes on high blood pressure; factors responsible for high blood pressure in people with chronic kidney disease; mechanisms of blood flow through the kidneys of people with high blood pressure; and regulation of tubular transport function by the kidney.

MURPHY OIL GIVES BUILDING

Murphy Building Corp., a wholly-owned subsidiary of Murphy Oil Corp., has donated the former Murphy Exploration Building to Tulane to help continue the expansion of the School of Medicine.

"We are overwhelmed by this generous donation," Tulane University President Scott Cowen said. "This is the latest in a long legacy of support we have received from those affiliated with the Murphy Oil Corp."

Cathy Pierson, former chair of the Board of Tulane and sister of Claiborne P. Deming, Murphy Oil Corp. president and chief executive officer, was instrumental in securing the donation.

The 15-story, 204,500-square-foot building, at 131 South Robertson St., will include administrative and educational offices and a planned \$5 million medical training simulation center, one of the few such medical resources in the country.

Tulane should begin occupying the building during the first quarter of 2008. Constructed in 1983, it has been significantly renovated over the years. The adjoining parking garage, which was included in the gift, has a capacity for 233 cars.



EXAMINING "KATRINA COUGH"

Rumors of a "Katrina cough" started circulating in New Orleans as soon as people began clearing debris, gutting houses and rebuilding after Hurricane Katrina. Is this complaint caused by breathing polluted dust, or is it seasonal allergies? And can it cause long-term changes in respiratory health? A researcher in the Tulane School of Medicine seeks answers.

In January, Dr. Henry Glindmeyer, a professor of pulmonary, critical care and environmental medicine, launched a five-year study to determine if workers in New Orleans face risks from inhalant exposure to minute particles such as mold, fungi or bacteria.

The National Institute for Occupational Safety and Health, an agency of the Centers for Disease Control and Prevention, is



Dr. Henry Glindmeyer and his mobile lab: A focus on post-hurricane lung health.

providing \$1.86 million for the work.

Glindmeyer will gather data annually from approximately 1,000 workers at the area's larger employers, using a mobile lab that will travel to worksites. Testing consists of a respiratory and occupational questionnaire, a breathing test and once-a-year exposure monitoring.

"Participants will tell us where they work, where they live, what they do and the type of dust-generating activities they may be in or around," says Glindmeyer.

In the respiratory exposure assessment, workers will wear a small monitor for about five to six hours. "The monitor uses

a filter to capture dust small enough to get deep into the lungs," Glindmeyer says.

Samples will be analyzed for airborne dust, bacteria and mold to measure exposure associated with specific work activities and any changes in lung function or respiratory conditions.

The Katrina worker study is the latest in a long list of investigations of occupational inhalant exposures that Glindmeyer and his associates have conducted over the last 35 years.

For more information about the study, visit <http://katrinaworkerstudy.tulane.edu>.



HEART-SMART: IT'S ELEMENTARY

Because healthy lifestyles begin in childhood, Tulane cardiologist Dr. Gerald S. Berenson spearheaded a \$140,000 grant to continue the third year of a health promotion program for 7,000 elementary school children in Washington Parish, La.

Berenson, research professor of epidemiology, medicine and pediatrics, is applying lessons learned from the Bogalusa Heart Study, the longest and most detailed study of a biracial (black and white) population of children in the world. The study focuses on understanding the early natural history of coronary artery disease, hypertension and diabetes, according to Berenson, its principal investigator.

"We know that heart disease, obesity and bad lifestyles like smoking and drinking alcohol start in childhood," Berenson says. "This is primary prevention, beginning in childhood, rather than giving them drugs after they already have heart disease."

The Health Ahead/Heart Smart program received the grant from the Southeast Louisiana Area Health Education Center.

"We hope to make this a model for counties across the United States to adopt," he adds. "Everyone has a program to prevent obesity, but no one else has a program that is this comprehensive."

LINKING PHYSICIANS AND PATIENTS DURING A DISASTER

Researchers at the Hayward Genetics Center at Tulane will receive \$1 million over five years to come up with a plan to link geneticists and their patients in the event of a disaster like Hurricane Katrina.

The project, funded by the Health Resources and Services Administration, is part of a larger \$5 million program between Tulane and Emory universities.

Dr. Hans Andersson, Hayward Genetics Center director, says that local researchers have invaluable lessons for other doctors on what works and what doesn't in the face of a real disaster.

Following Katrina, the center scrambled to locate patients scattered to the winds. Many were on very specific medications and had a limited supply.

"We follow patients who have genetic metabolic diseases who have a risk of getting catastrophically ill if they aren't on the right medicines or following a careful dietary protocol," says Andersson, the principal investigator for Tulane's portion of the grant. "All of a sudden we had a scenario where everyone was disconnected. We didn't know where the patients were and they didn't know where we were."

Researchers are coming up with a plan for a robust telecommunications system that would allow geneticists to communicate in a disaster. One scenario calls for a teleconferencing system comprised of a laptop, a webcam and a satellite modem. Doctors could plug their laptops into their cars and set up a conferencing system from anywhere across the country or around the globe.

The teleconferencing system can also be used to perform patient examinations and consultations at remote sites where genetic specialists are in very short supply.



Tulane physicians will develop a teleconferencing system for communication in a disaster.



SAVOIE'S A SPORT!

Dr. Buddy Savoie, a native of Belle Rose on Bayou Lafourche in south Louisiana who practiced sports medicine and orthopaedic surgery in Jackson, Miss., for 20 years, is the new chief of the division of sports medicine at Tulane.

Savoie specializes in elbow and shoulder surgery. In June, he performed live rotator cuff repair surgery before a large gathering of surgeons at a meeting in France.

Earlier this year, Dr. Raoul Rodriguez, professor and chair of the Tulane School of Medicine's orthopaedics department, urged Savoie to come to New Orleans, where many doctors are needed post-Katrina.

"I think New Orleans is an awesome town," Savoie says. "It's one of the truly unique places in the world, and if these guys thought that I could help with building it back, then I felt obligated to try."

by Diana Pinckley
photography by Yunghi Kim

**Tulane faculty, residents and students
are delivering quality medical care in
a damaged city as they build a better
healthcare system from the ground up.**

Reaching Out

On Sept. 15, 2005, only days after Hurricane Katrina's winds had died and the floodwaters from the levee breaks receded, a table went up outside Covenant House on Rampart Street at the border of the French Quarter. Behind the table was a physician who had only a box of basic supplies, paper to write on and an ice chest to keep the tetanus vaccine cold.

From that unprepossessing, courageous beginning has grown Tulane University Community Health Center at Covenant House, a community-based clinic offering both urgent care and "medical homes"—consistent, ongoing services delivered for free or at a low cost by a holistic team that knows the patient.

This approach, arising from a medical system in chaos, may well become the new and improved model for health care across the nation. "How many times in your life do you get a chance to reinvent a healthcare system from the ground up?" asks Dr. Karen DeSalvo (M'92, SPHTM'92), the energetic executive director of the clinic.

The world is taking notice. The country of Qatar gave \$5 million to the community health center, Johnson & Johnson supported its first year, and it participates in a \$100-million, three-year Primary Care Access and Stabilization Grant program awarded to the Louisiana Department of Health and Hospitals by the U.S. Department of Health and Human Services.

Dr. Karen DeSalvo: The right care at the right time in the right place.



DESALVO HAS BEEN NAMED A “HERO” in the columns of the *Times-Picayune* and a *People* magazine profile. She’s given testimony on Capitol Hill that helped capture the \$100 million federal grant, and she has been a part of a key health-care-planning policy group at the state level. Dr. Eboni Price, medical director of the health center, was named one of “20 People Who Make Health Care Better” by the national magazine *HealthLeaders*. And *AM News*, a publication of the American Medical Association, notes that “physician organizations promoting medical homes in private practices nationwide are watching to see what happens.”

Part of the approach is taking the service to where the patients are. The Community Health Center sees about 1,000 patients a month, says DeSalvo, an associate professor of medicine, chief of the internal medicine and geriatrics section and newly appointed vice dean for community affairs and health-care policy. The group also works from a mobile health van based at St. Anna’s Episcopal Church and plans two additional bricks-and-mortar sites during 2008. These are likely to be the first steps of a citywide network of similar clinics offering their clients preventive medicine, in lieu of the long emergency room waits that were common in pre-Katrina New Orleans.

The thriving community health center (www.tucovenanthealthcenter.org) is firmly established in a space that once served as a boys’ dorm for Covenant House. Open from

8 a.m. to 7 p.m. Monday, Tuesday and Thursday and 8 a.m. to 5 p.m. Wednesday and Friday, the walk-in center includes eight examining rooms, a waiting room with an accessible Internet-linked computer and an LCD screen that can serve as a TV or educational source, and open-plan office space that is shared by physicians, nurses, social workers, schedulers and case managers.

Each patient is assigned to a physician to assure continuity of care. The most common issues among the patients who return for treatment are managing high blood pressure and diabetes, while urgent care covers rashes, colds, coughs, flu, bladder infections and the like.

A dozen or so Tulane medical students, along with their public health and social work counterparts, join with attending and resident doctors to see walk-in patients two

Saturdays a month as part of the Fleur de Vie Clinic (www.fleurdevieclinic.org), the first free community healthcare clinic in New Orleans founded, organized and operated by students. The Fleur de Vie Clinic received a Johnson & Johnson Community Health Care Leadership Award last year.

“Post-Katrina, we had an opportunity to build a clinic around the patients and their needs,” DeSalvo says. “We are very light on barriers to entry. We continue to offer primary care, electronic medical records and build teams. And what we’ve built here, we can sustain for at least three years.

“When we started immediately after the storm, first we had to build a dike and then put our fingers in it,” DeSalvo continues. In the days following the hurricane, Tulane kept clinics open seven days a week, becoming the largest ambulatory care provider in Orleans

You have to know where your patients are coming from and what they need.

—Dr. Eboni Price



CARING FOR KATRINA’S CHILDREN

Other Tulane outreach is focused on young people. To cite just a few of many projects:

Dr. Sue Ellen Abdalian, professor of clinical pediatrics and chief of adolescent medicine at Tulane, founded the Adolescent Drop-In Center a decade ago to reach out to street kids with HIV prevention and education, reproductive care, mental health, substance abuse counseling and treatment, and clinical medical services. The original structure



was badly damaged by the storm, so the Center reopened in Covenant House space, extending its services to younger children as more and more families returned to the city.

The pediatrics department also operates two bright blue mobile medical units provided by the Children’s Health Fund partnering with the New Orleans Children’s Health Project.

Dr. Pamela Wiseman, associate professor of family medicine, is medical director of the new West Jefferson High School Based Health Center in Harvey, serving 1,200 students. Dr. Stephen Weimer, associate professor of pediatrics, directs a clinic for the 600-student Butler Elementary.

Parish. Faculty, residents and students set up medical sites on the porch of Harrah's casino, in tents, near police precincts and in parking lots, providing free care to about 400 patients a day.

Even during that catastrophic time, "our patients were getting good care," says DeSalvo. "And residents and medical students were getting experience beyond hospital walls."

Among those residents was Dr. Stu Bagatell (M' 04). "When we first got back from the storm, people at the Covenant House clinic were frustrated," says Bagatell, who is now chief resident in Tulane's internal medicine program. "There were no labs. It was such a new concept, such a new way to practice medicine—without technology. But those who stayed on have discovered it's the most desirable place.

"All of our patients get the service they'd get in a VIP practice," Bagatell says. "I have time to give them the care they need, to make phone calls to them about smoking, or about their blood work."

His practice at the community health center has also made him more open to considering a career in primary care—and more aware of the creative thinking physicians must often develop to solve the problems of the uninsured.

Creative problem-solving is a strength of the clinic's medical director Dr. Eboni Price. She returned to her native New Orleans shortly before the storm, after stints at the Johns Hopkins University Schools of Medicine and Public Health and the Baylor College of Medicine.

As associate program director for the internal medicine residency, "my goal was to find residents a place to train," says Price.

But providing simple services for first-responders and residents in the mostly dry Treme neighborhood near the health center soon became more sophisticated. And Price found herself becoming a center for supply distribution, among her many other



DeSalvo at the Community Health Center: "We've figured out a model, and it works."

duties. "We developed a complex system for managing donations from whoever came in town and dropped them off," she says. "The military gave large packets of supplies. Somehow my cell made it to the Internet, so people called."

Price uses the community health center today as a way to increase the exposure of those in the residency program to community-based medicine. "It's a whole different ball game when you're removed from hospital systems and working out in the community," she says. "You have to know where your patients are coming from and what they need. You can't just send someone down the hallway for something. When you have to teach a patient to navigate the healthcare system, that means you have to know, too.

"Your reflex may be to write all these prescriptions, but can your patients afford them? And if not, what are the alternatives? You have to know what works given what your patient can pay."

These are some of the many lessons learned from two-and-a-half years at the Tulane University Community Health Center at Covenant House, DeSalvo says, ticking others off on her fingers. "We must work more closely with the community to understand needs and expectations. We

have to make what we're doing sustainable, and continue to build on a solid financial footing." Right now, the clinic operates on a capitation grant, getting a fixed amount for the residents it serves.

Site-based decision-making is crucial. "A problem is fixed on the ground—or within the four walls," says DeSalvo. "There's very little bureaucracy and micromanagement. We grew from an environment where we were not constrained by billing and coding. We started from the other end—from delivery of good medical care."

Organizations have also learned they have to work together, DeSalvo adds, citing the Partnership for Access to Healthcare as an example. PATH's dozen organizations and 18 sites share electronic medical records and refer patients among themselves. "There are fewer silos," she says. "We're less isolated and more open to individual efforts."

After the storm, DeSalvo and her colleagues learned they could drive policy through their own energy, persistence and ideas. "The clinics took root—now we know we can do it," she says. "While we might quibble about the details, we know we can build medical homes. We have proved that people can get care of high quality and efficiency. We've figured out a model, and it works." ■



Full Speed Ahead

by **Diana Pinckley**
photography by **Will Crocker**

The new dean of the Tulane University School of Medicine has hit the ground running, with extensive experience behind him and exciting plans ahead.

DR. BEN SACHS IS A MAN WHO LIKES A CHALLENGE. Here's one example: The new dean of Tulane University School of Medicine and the university's senior vice president for health sciences went hiking in the Himalayas before coming to Tulane. The nine-day trek to a Mount Everest base camp, he says, cleared his head. "At the end of the day you have to have the will to keep on moving through headaches and muscle pain. You learn a lot about yourself."

And another: A runner for many years (currently averaging five miles, five times a week), Sachs has formed the School of Medicine Dean's Tulane Wave Runners Club, a group of students, faculty and administrators, largely but not exclusively from the medical school. The group meets at 8 a.m. every Sunday at Audubon Park. "It varies from 2 to 40 students, depending on whether it's been a heavy night-before or if it's exam time," Sachs says. "The idea is for me to meet students. There's nothing like a sweaty, out-of-breath dean to invoke informality."

But perhaps his greatest challenge is his newest—leading the way to a different model of health care for New Orleans and beyond. "Tulane can make a difference," says Sachs, 56, who began his new role Nov. 1, moving from leadership posts in obstetrics and gynecology at Harvard Medical School and its teaching hospital, Beth Israel Deaconess Medical Center.

Dr. Ben Sachs (center front) and medical students in Audubon Park.



**Tulane will be a leader in
providing high-quality,
cost-effective care to
people of the region.**



T“Tulane will be a leader in providing high-quality, cost-effective care to people of the region,” he says. “We have an opportunity to demonstrate a different way of providing care. Tulane is private; it’s the largest employer in the city. It’s our responsibility to take action on a timely basis.”

One of those changes is establishing a network of neighborhood clinics to provide an alternative to the Charity Hospital model of health care delivered through emergency rooms. Boston did it while Sachs was part of the medical community there, and it is working well, he says. Tulane operates one neighborhood clinic, the Tulane Community Health Center at Covenant House, which provides low- or no-cost care for patients. (See story, page 6.) Its executive director is Dr. Karen DeSalvo, associate professor of medicine and chief of Tulane’s section of general internal medicine and geriatrics.

“Tulane, under the leadership of Karen DeSalvo, will play a bigger role in health care for the socially disadvantaged in the state,” Sachs predicts. “The issues challenging healthcare delivery in Louisiana were exacerbated by Katrina, and Louisiana is a state with high poverty levels. We want to show how we can respond to and rebuild from a devastated system. Our healthcare system—how and where health care should be delivered—can become a role model for the country.”

AN INTERNATIONAL REPUTATION

Sachs has long been a leader in academic and clinical medicine. A native of London, he earned a medical degree from St. Mary’s Hospital Medical School (now the world-renowned Imperial College). He received a degree in public health from the University of Toronto and completed a residency in obstetrics and gynecology and a fellowship in maternal-fetal health medicine at Brigham and Women’s Hospital in Boston.

Sachs had been affiliated with Harvard Medical School for 29 years. He was chair of the obstetrics department at Beth Israel Deaconess Medical Center since 1989, he held the Harold H. Rosenfield Professorship of Obstetrics, Gynecology and Reproductive Biology at Harvard Medical School, and he served as a professor in the department of society, human development and health at the Harvard School of Public Health. He has been a visiting scientist at the Centers for Disease Control and Prevention, and he completed the PMD (business management) program at Harvard Business School in 1987.

He has applied his medical management skills in groundbreaking ways. “To improve patient safety, our department was the first in obstetrics and one of the first in clinical medicine to successfully adapt the principles of Team Training/Crew Resource Management (CRM) from commercial aviation and the military,” Sachs says, noting that the project was funded by the Department of Defense and Harvard’s Risk Management Foundation. Team Training/CRM encourages teams to accept their own fallibilities, thus encouraging them to focus on ways to work together to prevent error—or to keep errors from causing harm.

“As a result of our success in improving clinical outcomes and reducing litigation, our approach has now been adopted by departments of obstetrics at all Harvard teaching hospitals,” Sachs adds. “Nationally, Maryland and Massachusetts have begun state-wide initiatives, and many teaching hospitals, have followed our lead. The Department of Defense has mandated this approach in all their hospitals.” Sachs and his team are now developing CRM programs for emergency medicine, intensive care and surgery; he plans to implement the concept as part of a new Simulation Training Center at Tulane.

Sachs’ Team Training/CRM work has been recognized with the 2007 Blue Cross Blue Shield Excellence in Healthcare Award and the Eisenberg Award for Patient Safety and Quality from the Joint Commission/National Quality Forum (October 2007). It has been published by JAMA, the Agency for Healthcare Research and Quality, the Joint Commission on Accreditation of Healthcare Organizations, Obstetrics & Gynecology and Contemporary Ob/Gyn.

In 1999, Sachs was elected president of the Beth Israel Physician Organization, an organization of 1,500 doctors responsible for negotiations with health insurance companies on contracts worth about \$200 million annually and for hospital utilization/resource management and cost containment. He set out to create an independent and expanded organization, to radically change its direction and to restructure the management. Following three terms in office, he stepped down in 2006.

Sachs has two sons. Alex, 24, a recent Emory University graduate with a major in economics and a minor in Arabic, is pursuing graduate studies in biology. Jonathan, 18, is a student at Boston University with a major in environmental sciences and a minor in remote imaging.



Tulane Medical Center Chief Executive Officer Dr. Robert Lynch (left) and Dr. Ben Sachs regularly conduct white-coat rounds.

With deep roots in Boston, Sachs had to think a bit before accepting the post-Katrina challenge. But fate, in the form of airline seating patterns, played a role. On his first trip to talk about the Tulane position, in May, the problems seemed overwhelming even to him. How could he make a difference? But as he flew home, he sat beside a woman whose daughter-in-law had just graduated from Tulane. She had no idea who he was as she spoke with admiration of students who were helping the region rebuild and the unique education the university had given them.

He accepted the job two months later, succeeding Dr. Paul Whelton, who left Tulane in January, 2007, to become president of the Loyola University Health System in suburban Chicago.

Sachs wrote in his e-mail to Boston colleagues, announcing his departure: “To give you a flavor of Tulane: at the graduation ceremony this spring, the commencement speaker, Brian Williams, asked all the students who had volunteered to help the region to recover from the storm to stand up and be recognized. I understand almost all the students stood up. One of the parents said to me that one could not pay for this kind of education. The university had instilled into the very souls of the students the concept of public service.

“In this environment, the faculty can educate the next generation of physicians not only in the science of medicine but also by example, to truly demonstrate humanitarian values.”

To his friends, his decision didn’t come as a real surprise. “Those of you who know Ben know that he would not leave us for a standard ‘academic’ appointment at another institution,” wrote Dr. Paul Levy, president and CEO of Beth Israel Deaconess in announcing Sachs’ decision. “Here, he is taking on a mission of great humanitarian import.

“This assignment is so consistent with Ben’s philosophy of life and his prior good deeds throughout the world that we cannot be surprised. Of course, here at BIDMC, Ben has also been known for

running a superb department with an outstanding record in clinical care, education and research. He has been an innovator in everything from team training to encouraging young researchers in fields like preeclampsia.”

While at Harvard, Sachs helped create the research team, led by Dr. Ananth Karumanchi, that discovered the probable causes of preeclampsia, a life-threatening syndrome that affects women in late stages of pregnancy and their babies. Worldwide, it is thought to kill more than 75,000 women a year. The team also developed a new diagnostic test for the disease that is being evaluated by the World Health Organization. Results of the research were widely published in outlets including the *New England Journal of Medicine* and *The New Yorker*.

THINKING OUTSIDE THE SILO

In the first weeks of his Tulane tenure, Sachs has put into place a structure that can similarly support research as it crosses traditional department and school boundaries. Top-level Tulane administrators, including Michael Bernstein, provost; Andrew Lackner, director of the Tulane National Primate Research Center; Laura Levy, associate senior vice president for research; and Nicholas Altiero, dean of the School of Science and Engineering, meet with Sachs for an hour every week to discuss the future of science at the university.

“We want to bring together physicists and chemists and biologists with information technology people and engineers and other colleagues to create a new paradigm of research,” Sachs says. “Most universities dream of doing this, but most have been unable to do it, because they function in silos and have poor communications between the school of medicine and other schools. Tulane’s culture is more collaborative than most—in a post-Katrina environment, we should do this yesterday. The fact that senior people are willing to take so much time to work on it indicates that we take it very seriously.

"It's more than collaborative proposals. It's new ideas," he continues. "Biologists sit in their labs and look at life from a biological perspective, but life is a lot more complicated than that. A biologist should be able to walk down the corridor and talk to a mathematician about modeling, for example."

Tulane's research budget for this academic year is about \$136 million, virtually the same as it was pre-Katrina. "A marked growth in world-class biomedical research is vital for the region's economic growth," Sachs says. "We think we can double our research support in the next 10 years. That's a tall order, given current NIH budgets, but it makes logical sense, and it builds on current strengths."

Students are flocking to the new Tulane School of Medicine, as they are to other parts of the university. Interest is way up, Sachs says, with the entering class growing from 155 to 175 in the last two years.

Among their teachers, they will find their dean. Sachs teaches a seminar in the interaction of health policy, healthcare economics and medical practice. "I love to teach," he says. "I can choose from dozens of case studies. I want students to learn how to dissect problems and find solutions, not rely on rote memory. I want to teach them how to analyze problems and how to think." The seminar, which will enroll a maximum of 20 students who can come from any year of medical school studies, will include patient safety, how to interact with a patient's family and how to integrate technology into health care.

SIMULATION TRAINING

Tulane University Center for Health Care Simulation is a new \$5 million, pioneering initiative projected to be fully operational during 2008. Sachs has received international acclaim for his work in improving patient care and reducing medical errors through a groundbreaking adaptation of Crew Resource Management team training, an airline approach to safety, to the healthcare industry.

With the Center, he brings the concept to New Orleans in a way that will distinguish medical education at Tulane. "It will make a real difference in the education of residents and students—and have a real impact on medical quality and safety."

"Simulation training has become a vital component of airline safety," Sachs writes in a description of the new center, explaining that every pilot is trained in a simulator and then goes back to the program every year to be recertified.

"The Institute of Medicine has estimated that, in the United States, the number of people who die every day in hospitals as a result of medical errors is the equivalent of almost two jumbo jets crashing. In order to improve patient safety, a few of the world's leading academic medical centers have therefore begun to require that their physicians are likewise credentialed and recertified using simulators."

NASA, the U.S. military and commercial aviation have used the program for years; in 2001, Sachs' team at Harvard was the first to successfully adapt its principles from aviation to health care.

The new 14,000-square-foot Center for Health Care Simulation will feature fully equipped hospital emergency rooms, operating rooms, intensive care units, delivery rooms and more, Sachs says. "In this real-life environment, participants will receive intensive instruction and hands-on training in the latest medical procedures, devices and standards, to reduce medical errors and provide the most effective patient care. Comprehensive and multidisciplinary in its scope and approach, the center will be a resource for all medical professionals who come in contact with patients."

The Center will be housed in the 15-story, 204,500-square-foot former Murphy Exploration Building, at 131 South Robertson St., which Murphy Oil donated to Tulane in December.

One of a handful of such programs in the United States, it will be a training ground for disaster and trauma care. It will also serve as a testing site for newly developed medical devices from Tulane's biomedical engineering department as well as private sector manufacturers. Sachs predicts that, by setting a new international standard for healthcare simulation, the Center will teach, train and certify healthcare professionals from the region, the nation and Latin America.

A UNIVERSAL FOCUS

Sachs has long turned his attention to international issues. He raised the funds, largely from philanthropy, for the development of women's and children's health centers in a number of developing countries. These clinical programs have been used as laboratories for developing new approaches for primary health care for women and children, as well as professional education for international faculty. In addition, they provide educational experiences for residents and faculty interested in international health. He has developed health centers in the Philippines, Armenia and Ukraine. His current program in Dnieperpetrovsk, Ukraine, provides free healthcare for 20,000 women and children a year. It also established the first Pap test and mammography screening programs in the Ukraine.

While Tulane has extensive international involvement, Sachs believes there's room for expansion, particularly in Central America, Africa and Asia.

As he contemplates his unending series of 16-hour days, some of which include white-coat rounds with Dr. Robert Lynch, the chief executive of Tulane Medical Center, Sachs exudes a quiet energy and determination. "A teacher once said to me, 'Don't dwell on what is—concentrate on what can be.' You've got to have vision. While you're buffeted by daily problems, you have to continue to convey your mission and vision. People have to get excited about the dream." ■



The liver is the only organ in the body that can regenerate itself. This biological fact—combined with the nationally acknowledged expertise of the physicians in the Tulane Abdominal Transplant Institute—has saved hundreds of lives in the last decade.

New Organs, New Lives

by Arthur Nead

illustrations by Ken Orvidas

The Tulane Abdominal Transplant Institute, founded in 1997, offers state-of-the-art services to adults and children with liver and/or kidney disease. And it is unique in Louisiana. Tulane is the state's only living-donor transplant center approved by the United Network for Organ Sharing, the national registry which facilitates the organ procurement and transplantation process. For those who need a transplant, waiting times in the state also tend to be shorter than those in some other parts of the nation.

Tulane transplant surgeons have had outstanding success performing both kidney and liver transplants for children, says Dr. Sander Florman, associate professor of surgery and pediatrics and director of the transplant institute.

Over the last 10 years, live donor liver transplants have revolutionized the field, Florman says, noting that advanced techniques allow him and his colleagues to take a piece of the liver from a living donor and transplant it into a child.

“T

he liver is the only organ in the body that can regenerate,” says Florman. “Based on that, we do living donor liver transplants. We take a small piece, around 25 percent, of an adult’s liver, transplant this piece into a child, and the liver re-grows in both the recipient and in the donor.”

The Tulane team also has performed split liver transplants, in which a liver from a deceased donor is divided. The larger portion is transplanted into an adult and the smaller part into a child, saving the lives of two recipients.

“These innovative techniques have saved many children’s lives,” says Florman, “Before living donor and split liver transplants, there just weren’t enough organs for all the small children in need of them.”

The majority of very young children receiving liver transplants at Tulane suffer from biliary atresia, a congenital problem in which the bile ducts do not form. A smaller number have contracted liver disease from other causes.

About 60 percent of the adult liver transplants performed at Tulane are for patients with Hepatitis C. “With liver transplants, you are taking arguably the sickest people who come into the hospital and giving them the biggest operation that a human being can have,” says Florman.

“Then they walk out of the hospital a week or two later. If it’s just the liver that has failed, we replace the liver and these people can do remarkably well and lead full lives. It’s truly phenomenal.”

In the United States approximately 18,000 people are on the United Network for Organ Sharing waiting list for liver transplants. About 10 percent of them will die this year because they did not have the chance to have a liver transplant.

“There is a real need for organs,” says Florman. “The demand far outweighs the supply.”

Some 75,000 people in the United States are waiting for kidneys, which can take from three to seven years, depending on their blood type and where they live. “The allocation of kidneys is based on waiting time, because people who are on dialysis are considered to be all equally sick,” says Florman. “However, because there are more donors per capita in Louisiana and fewer people waiting, our wait for kidney transplants is three or four years, whereas on the East Coast it can be as long as seven years.”

For liver transplants, where everybody is not equally sick, allocation of available organs is currently determined by the MELD, or Model for End-stage Liver Disease, system.

“This is a disease-severity index where livers are allocated to the sickest patients based on three factors determined by blood tests: the patient’s bilirubin, creatinine and the blood clotting time, because the liver makes the clotting factors,” says Florman.

These values are plugged into a complex formula to derive a score that ranges from zero to 40. The higher the number, the greater the need for a liver transplant and the higher the likelihood of dying without a transplant.

“In general, we don’t offer transplants to people with scores under 15,” says Florman. “A report from the Institute of Medicine states that you are better off with your own liver until you get sick enough—the risk doesn’t justify it. One significant exception, however, is for patients whose scores might not be that high but have a malignancy confined to the liver that meets very specific criteria.

“So that’s how we give out livers now. The average score on the East



“These innovative techniques have saved many children’s lives,” says Dr. Sander Florman. “Before living donor and split liver transplants, there just weren’t enough organs for all the small children in need of them.”

Coast to receive a transplant might be 26 or so, but in Louisiana it’s lower—22 or 23—so there is a significant benefit to being on the transplant list at Tulane.”

The expertise and teamwork involved in patient care at the Tulane Abdominal Transplant Institute is another significant benefit.

“We’re a true multidisciplinary group,” says Florman. “We now have four surgeons, including Dr. Douglas Slakey, chairman of the Department of Surgery. We have two nephrologists and three hepatologists, including Dr. Luis Balart, who recently joined our group and is the chief of gastroenterology. Our hepatology group has a combined clinical experience of more than 70 years!

“We practice together, and our offices are located together. We have our own multidisciplinary clinic where we see our patients together, and we have our own inpatient unit where we take care of our patients together.”

The 22-bed Abdominal Transplant Unit is on the seventh floor of the Tulane Hospital. “The beds are universal beds,” says Florman. “The rooms are fully functional ICU rooms, and the patients spend their entire hospitalization in the same room. As their clinical status changes, the nursing level for each patient changes, which is great for the patient, and it is great for continuity of care.”

Unit staff are all specialized—transplant nurses, a transplant pharmacist and a transplant dietician, for example—because transplant patients, particularly liver patients, have a lot of specific needs.

Families are encouraged to remain in the hospital with the patients. “We want the families to be involved in the patient’s care around the time of transplant, because they are an important part of the bigger picture of long-term compliance and help ensure good outcomes once patients leave the hospital,” says Florman, noting that the rooms are all private rooms with bathrooms, which makes it easier for family members to be present.

A key to the success of the transplant institute is its commitment to the long-term management of liver disease. “We see transplant as just one part of the entire spectrum of care,” says Florman. “When, for example, a patient with Hepatitis C comes to us, we first treat the disease. Then when they get so sick that their own liver is not good enough, we replace it and then manage their care afterwards, as well.

“Our motto is ‘Your team for life.’ We’re not here just to do the transplant, but to care for the patient for his or her entire life. We focus on the broader picture—that sets us apart.”

For more about becoming an organ donor: www.unos.org, www.lopa.org, www.tuhc.com

FAMED HEART SURGEON DR. MICHAEL DEBAKEY (MEDICINE '32) has been approved by Congress and the President to receive the Congressional Gold Medal, the nation's highest and most distinguished civilian honor.

DeBakey, 99, also received his undergraduate degree from Tulane in 1930 and a master of science degree in 1935. He is chancellor emeritus of the Baylor College of Medicine, where the Tulane School of Medicine found a home for the academic year after Hurricane Katrina. The surgery department at Baylor is named the Michael E. DeBakey Department of Surgery.



Dr. Michael DeBakey

DeBakey's pioneering innovations include the first successful coronary artery bypass surgery; the first procedure to implant a partially artificial heart; and, in 1968, an historic multiple-transplantation procedure in which the heart, kidneys and one lung of a donor were transplanted to four recipients.

DeBakey has also devised over 50 surgical instruments. He has operated on more than 60,000 patients during his long career.

During World War II, DeBakey was appointed director of the surgical consultants' division of the U.S. Surgeon General's office, where his work led to the establishment of MASH units. He also helped soldiers

returning from war receive treatment by organizing a medical center system that later became the Veterans' Administration Medical Center System.

In December, DeBakey was presented with the bill that President George W. Bush signed to authorize DeBakey's Congressional Gold Medal.

The bill with President Bush's signature will be on exhibit in the new DeBakey Library and Museum, scheduled to open soon at Baylor College of Medicine.

The first Congressional Gold Medal was awarded in 1776 to Gen. George Washington. It is bestowed both for singular acts of exceptional service and for lifetime achievement. A special medal reflecting DeBakey's accomplishments will be struck by the National Mint; its formal presentation will occur in 2008.

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.

'45 Dr. Gerald Berenson (A&S '43), research professor of epidemiology in the Tulane School of Public Health and Tropical Medicine, was honored by the International Academy of Cardiology for founding the renowned Bogalusa Heart Study, which has tracked the Louisiana town's cardiovascular history for more than three decades. In August 2007, Berenson received the Jan J. Kellerman Memorial Award for distinguished work in the field of Cardiovascular Disease Prevention, which was conferred by 140 of his fellow cardiologists. Berenson

also was named an honorary alumnus of the Louisiana State University School of Medicine by the board of the LSU Medical Alumni Association. The award was presented during the scientific session at the LSU Medical Alumni Weekend on June 9, 2007. He spearheaded a recent \$140,000 grant to continue the third year of a health promotion program for 7,000 elementary school children in Washington Parish, La. The Health Ahead/Heart Smart program received the grant from the Southeast Louisiana Area Health Education Center. (See story, page 4.)

'53 Dr. William A. "Doc" Middleton was recognized for 50 years of service to the community in Montgomery County, Miss., with a celebration of "Dr. W.A. Middleton Day" in Winona, Miss., on Nov. 4, 2006. The community recognition paid tribute to Middleton, who received the 2006 Family Physician of the Year Award from the Mississippi Academy of Family Physicians.

SOMETIMES KEEPING YOUR WORD COMES AT A PRICE.

Perhaps no one knows that better than neurosurgeon Dr. Jim Doty

(Medicine '81), who ended up giving away 99 percent of his net worth to keep his promise to Tulane and others.

Doty, 51, gave stock worth approximately \$4.4 million to the School of Medicine. It is one of the largest gifts to the school by an alumnus.

The director of neurosciences and rehabilitation for Memorial Hospital-Gulfport, Doty is a former professor of neurosurgery at Stanford University who holds several patents for medical devices. While in California, he accumulated millions in paper profits from investments in medical technology—and then lost almost all of it in the dot-com meltdown.

His donation will establish two endowed chairs, fund scholarships for socioeconomically disadvantaged students and help renovate the medical library.

He has requested the scholarships be named in honor of two of his earliest mentors when he came to Tulane in 1975 to attend the Medical Education Reinforcement and Enrichment Program (MEdREP), a summer program for minority and economically disadvantaged students interested in pursuing a career in medicine. Those mentors were MEdREP founder Dr. Anna Cherrie Epps and physician Dr. Morris Spirtes, in whose lab Doty worked.

MEdREP helped him form relationships with medical school faculty that ultimately led to his acceptance in the graduate program. Doty, whose family was on welfare for most of his childhood, struggled in school before college. "I went to that program for the summer, and it was life-changing for me. It gave me the chance to interact with people who could see that I had the drive,



Dr. Jim Doty

the intelligence and motivation to succeed in medical school," he said.

Dr. Benjamin Sachs, senior vice president and dean of the medical school, is the first to hold the James R. Doty Distinguished Endowed Chair in the School of Medicine.

"Representing an individual with such distinction and moral courage is a wonderful opportunity," said Sachs at the December ceremony.

Doty said he grew up in southern California, without role models who held college degrees.

"It was the summer enrichment program at Tulane that allowed me to be exposed to individuals who not only were role models but who were also sympathetic to my unique situation and not fixated on only my GPA or MCAT scores—individuals who judge a person by their character and action and not by a piece of paper that at best gives only a one-dimensional view of an individual," Doty said.

"I believe that is one of the strengths of Tulane."

“

REPRESENTING
AN INDIVIDUAL WITH
SUCH DISTINCTION
AND MORAL COURAGE IS A
WONDERFUL OPPORTUNITY.

”

—Dean Ben Sachs

'61 Dr. John Overby was honored as Rural Practitioner of the Year in 2006 by the Louisiana Rural Health Association. Overby, a clinical professor of surgery at the Tulane School of Medicine, works in Jonesboro, La., in an emergency department, his office, two nursing homes and the jail.

'73 Dr. Robert Freedman has developed and patented the Thermo-Suit System, a rapid, non-invasive core cooling system, through the company he founded, Life Recovery Systems. Life Recovery Systems is sponsoring clinical investigation of therapeutic hypothermia for the treatment of acute central nervous system and cardiac ischemic disease: www.life-recovery.com.

Dr. Thomas Grimstad began work as the president and chief executive officer of the Louisiana Medical Mutual Insurance Co. in January 2008.

'79 Dr. Stephen Carlson was appointed a staff anesthesiologist at Shriners Hospitals for Children in Spokane, Wash.

'80 Dr. Mary Puissegur Lupo (NC '76) was elected president of the Women's Dermatological Society for 2007–08.

'82 Neurosurgeon Dr. Frank Culicchia (A&S '77) has been named clinical professor and chairman of neurosurgery at LSU Health Sciences Center. Medical director of the Culicchia Neurological Clinic since 1989, he has served as chairman of the Department of Surgery at West Jefferson Medical Center and as a clinical associate professor of neurological surgery at Tulane. Visiting professor at Khon Kaen University in Thailand for six years in the 1990s and a frequent presenter to professional groups, he is co-author of *Interventional Radiology—Strategies and Practical Techniques, Part II: Fundamentals of Interventional Neuroradiology*.

'93 Dr. Octavio Carreno (E '89) joined the staff of the Maine Coast Memorial Hospital in Ellsworth, Maine, as an otolaryngologist. He previously practiced otolaryngology in Orange Park, Fla. He is a lieutenant commander in the Medical Corps of the U.S. Naval Reserve.

'97 Dr. Michael Kim and Dr. Krista Burris Kim were married in 2000. After completing residency training at the University of California—San Diego, the couple moved to Indio, Calif., to direct a clinic for the homeless. The Kims job-share at the clinic and at home, raising two daughters, Abygale, 4, and Olivia, 1.

'99 Dr. David Whitehead (PHTM '99) and Abney H. Whitehead, L '03, of St. Simons, Ga., announce the birth of Smith on Oct. 22, 2007. He was preceded by sisters Tess in 2003 and Kate in 2005.

The Tulane School of Medicine unveiled a high-tech auditorium at its Poydras Street headquarters on November 9, dedicating it as the Dr. Gwynn Collins Akin Bowers Auditorium and celebrating with Tulane administrators, faculty and students, and honoree **Gwynn Akin Bowers**.

Bowers, who received a PhD in anatomy from the School of Medicine in 1965, is retired from Syntex Corp., a multinational pharmaceutical company, where she was a vice president. Her career has comprised responsibilities in academia, government agencies and the private sector. Since 2004, she has been a member of the School of Medicine Dean's Advisory Council.

When installation is complete, the auditorium will have seating for 195 people and state-of-the-art audio-visual equipment.



At the Tulane Medical Alumni Association 2007 meeting, officers were elected and three physicians were honored. Pictured from left:

Dr. Richard J. Field III (M'79), Centreville, Miss., President, Tulane Medical Alumni Association

Dr. Joseph A. Sabatier, Jr. (M'38), New Orleans, Distinguished Service Award recognizing demonstrated loyalty and service to the Tulane University School of Medicine

Dr. Steven M. Paul (A&S'72, M'75, G'75), Indianapolis, Outstanding Alumnus Award recognizing career accomplishments and excellence in the medical profession. Paul is executive vice president of science and technology and president of the Lilly Research Laboratories (LRL) of Eli Lilly and Company, with responsibility for all research and development at Lilly. He oversees the R&D efforts of over 8,000 LRL scientists and physician investigators with an annual R&D budget of over \$3 billion.

Dr. Gary C. Morchower (A&S'59, M'62), Dallas, the C.D. Taylor Award for community service

Dr. Joseph F. Sackett (M'66), Ponte Vedra Beach, Fla., President-Elect, Tulane Medical Alumni Association



TULANE MEDICAL CENTER, a partnership jointly owned by HCA and Tulane University, includes two hospital facilities and 25 clinics. The downtown campus, at 1415 Tulane Ave., and the Lakeside campus, at 4700 S I-10 Service Road West in Metairie, together house five Centers of Excellence: Tulane Hospital for Children, Cancer Center, Abdominal Transplant, Cardiovascular, and Tulane-Xavier National Center of Excellence in Women's Health. A sixth Center of Excellence, the Tulane Institute of Sports Medicine, is located on the uptown Tulane University campus.

8,300+ applicants, up from 6,800 in 2005

175 new first-year medical students

36 states that are represented in 2007 first-year School of Medicine class

75 listings for Tulane physicians in "Top Doctors" in 2007

27 new Tulane School of Medicine graduates matched with residencies in Louisiana in 2007—more than double the number for any other state

1,000/month
patients seen by Tulane physicians and medical students, on average, since they began the free Tulane Community Health Center at Covenant House in September, 2005.

25 STUDENT ORGANIZATIONS involve students at the School of Medicine, including: • Bridging Health Together • Doctors Ought to Care • Students Against Right-Brain Atrophy • Various professional interest groups • Groups for Latin American, Asian American and African American medical students



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