TULANE UNIVERSITY SCHOOL OF MEDICINE | SUMMER 2011



RESEARCH FUNDING HITS NEW HEIGHTS

A CHANGING ENVIRONMENT IN MEDICAL EDUCATION

MORE THAN SKIN DEEP

TULANE | MEDICINE

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Scientists at the School of Medicine are winning record funding as they pursue tomorrow's breakthroughs.



A CHANGING ENVIRONMENT

Thoughtful and timely innovations, at Tulane and elsewhere, are transforming medical education.



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ON THE COVER

MD/PhD student Catherine Howard, one of only 80 U.S. students selected to attend the prestigious Nobel Laureate Meetings this summer, represents the research excellence of Tulane University School of Medicine.



Correditation: A Successful Journey I am proud to announce that the Liaison Committee on Medical Education (LCME) has granted Tulane University School of Medicine accreditation for a period of eight years. The LCME, a joint committee of the Association of American Medical Colleges and the American Medical Association, is the accrediting body for all U.S. medical schools. After an extensive preparation process that included a detailed self-study, the site visit last January was one of the best visits in the history

of Tulane. I want to give special thanks to Tulane's accreditation committee, faculty and staff for participating in this vital process.

Welcome to Our New Chair of Biochemistry Following a national search, Dr. Hua Lu has accepted the position of Chairperson of the Department of Biochemistry at the School of Medicine beginning December 1. Lu received his PhD from the University of Medicine and Dentistry in New Jersey and Rutgers University and did his post-doctoral study in the Department of Molecular Biology at Princeton University. Lu is currently the Daniel and Lori Efroymson Professor of Oncology in the IU-Simon Cancer Center and professor of biochemistry in the Department of Biochemistry and Molecular Biology in the School of Medicine at Indiana University-Purdue University Indianapolis. Lu is joining a strong academic team and an outstanding faculty that will continue to lead Tulane to the forefront of research.

Cancer Research: A Team Approach This November, the Louisiana Cancer Research Consortium (LCRC) will open its doors to researchers from Tulane University, the Louisiana State University Health Sciences Center and Xavier University. The first of many state-of-the-art medical facilities planned for the city, the LCRC will pioneer breakthrough advances in detection, treatment and prevention of cancer while fostering economic development in downtown New Orleans.

Welcome to the Class of 2015 From more than 10,200 applications, 188 medical students were chosen for the Class of 2015, comprising what might be the strongest academic class in Tulane's history. I am confident that they will become both excellent clinicians and accomplished scientists during their years at Tulane.

Our Ongoing Commitment to the Community Last year, the School of Medicine received the prestigious Spencer Foreman Award for Outstanding Community Service from the Association of American Medical Colleges (*see page 3*). We are now embarking on a new endeavor called Tulane Empowers, which uses community engagement as a springboard for our students to help build stronger and healthier communities. At this moment, more than 25 programs are in place throughout the city, including nine community-based health clinics (comprised of five neighborhood clinics and four mobile clinics). Our newest proposal is a teaching kitchen that will demonstrate healthy cooking and eating skills, channeling New Orleanians' love for food into a tool that empowers patients and their families to live healthier lifestyles while combating and preventing the chronic diseases that disproportionately affect their communities.

Ben

Benjamin P. Sachs, MB, BS, DPH, FACOG Senior Vice President of Tulane University Dean of the School of Medicine James R. Doty Distinguished Professor and Chair

PS: You'll notice that an online survey follows this issue; you'll find it at **www.surveymonkey/s/tumedicine**. Please take a few minutes and fill it out. We promise to pay attention to every comment and use them to provide you with a better magazine.

TULANE | MEDICINE

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Published letters and comments may be edited for length.

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Top: Akilah Jefferson, right, is headed to an internal medicine residency at George Washington University, while Brenda Chao matched with an OB/GYN residency at Methodist Health System in Dallas.

Bottom: Chris Malone and his mom Vicki Malone celebrate his future assignments in Hawaii and San Diego.

FINDING THEIR FUTURES

ith family and friends sharing in the excitement, fourth-year students at Tulane University School of Medicine celebrated Match Day on March 17, each opening an envelope with the news about the next stop in their future careers. The students found out where they will complete their residencies at an event coordinated through the National Medical Resident Matching Program. Beginning July 1, they will spend the next three to six years in training at academic medical centers in 32 states. Of the class of 163, 44 about-to-be-physicians matched in Louisiana (27 percent of the class), and 77 (47.2 percent) have chosen primary care programs.

STUDENT'S INVENTION ATTRACTS ATTENTION

hird-year Tulane medical student William Kethman is an inventor and entrepreneur whose fledgling company, NOvate Medical Technologies, won the 2011 New Orleans Entrepreneur Week IDEApitch. The result: a free trip to California for Kethman to meet high-level potential investors.

NOvate is a New Orleans-based medical device development company focused on commercializing low-cost medical products. Its first product, SafeSnip, is a disposable obstetric device that simultaneously cuts, clamps and shields the umbilical cord from infection. It is designed for use in the developing world where infants are susceptible to infections caused by unsanitary birth conditions.

"I started this company because I wanted to make a difference and save lives," says Kethman, who is vice president of research and development for NOvate. He applied for the patent for SafeSnip with fellow 2008 Tulane School of Science and Engineering graduates Bryan Molter, Stephanie Roberts and Mark Young, as well as David Rice, associate professor of biomedical engineering at Tulane.

NOvate was selected through a combination of votes from a live audience and a panel of prominent investors, including Jim Coulter, co-founder of TPG Capital, a leading global private investment firm. Entrepreneur Week is an initiative of The Idea Village, a nonprofit that encourages a culture of innovation and provides focused tools and resources to accelerate the development of high-growth entrepreneurial ventures in New Orleans.



Medical student William Kethman with the disposable SafeSnip device.



A study by cardiologist Dr. Anand Irimpen shows a three-fold increase in heart attacks four years after the devastation in New Orleans.

STUDY: KATRINA TOOK TOLL ON HEARTS, TOO

he post-Katrina increase in heart attacks among New Orleans residents persisted even four years after the storm, according to a new study by researchers from Tulane University School of Medicine.

"To our surprise, the increase has occurred in the absence of any change in traditional risk factors—for example, age, high blood pressure, obesity and diabetes," says lead researcher Dr. Anand Irimpen, an associate professor of medicine for the Tulane Heart and Vascular Institute.

The study—an update to the researchers' two-year post-Katrina analysis—shows a persisting three-fold increase in heart attacks in New Orleans during the four years after Katrina. The report, presented in April at the American College of Cardiology's 60th Annual Scientific Session in New Orleans, is the first long-term analysis of heart attacks following a disaster.

While psychiatric conditions such as clinical depression, a history of coronary

artery disease and marital status did not appear to contribute to heart attacks in the initial two-year analysis, these factors seem to play a significant role as time has progressed. Irimpen suggests there is a lag between the onset of psychiatric illness and its manifestation in the form of a heart attack.

The study analyzed the number of heart attack patients admitted to Tulane Medical Center two years before the storm and four years later. Researchers compared the two groups' demographic information, lab test results, health insurance, first-time hospitalization, smoking status, substance abuse and employment.

In the post-Katrina group, there were 629 confirmed heart attack patients, out of a total census of 29,228 patients (2.2 percent), compared to 150 heart attack admissions out of a total 21,229 patients (0.7 percent) in the pre-Katrina group. Post-Katrina patients were more likely to be unemployed, smoke, be less compliant with treatment plans and report substance abuse.

MEDICINE **NEWS**

COMMUNITY SERVICE WINS NATIONAL AWARD

The Association of American Medical Colleges, which represents all 133 accredited U.S. and 17 accredited Canadian medical schools, has presented Tulane University School of Medicine its Spencer Foreman Award for Outstanding Community Service.

The award, one of the organization's most prestigious honors, recognizes Tulane as a national leader for creating a network of community health centers; training its students to focus on community service; and empowering residents devastated by Hurricane Katrina to take charge of their personal health as well as the health of their communities.

"Five years ago, it was Hurricane Katrina. This year, it was the Gulf of Mexico oil disaster," said AAMC in presenting the award. "In both cases, the faculty and students of Tulane University School of Medicine went beyond the call of duty to find opportunities to serve....In dark times, the Tulane community has proved its ability to care for New Orleans residents."

The award is named in honor of Dr. Spencer (Spike) Foreman, president emeritus of Montefiori Medical Center in the Bronx, N.Y. From 1963–65, Foreman did his internal medicine residency at the New Orleans Public Health Service Hospital, a Tulane-affiliated program. He then completed a pulmonary diseases fellowship in the Tulane Department of Medicine in 1967.

MEDICINE | NEWS

MEDICAL STUDENTS CARE FOR HOMELESS

early every Sunday, Tulane University School of Medicine students gather at Ozanam Inn, a homeless shelter in downtown New Orleans, where they conduct a clinic. The doctors-to-be learn "bedside manner" and other skills, while providing basic care to people who have been forgotten by many.

The clinic was founded by Adam Johnson, a third-year student in the Tulane combined MD/MPH program, and Casey Rebholz, a third-year medical student who has a master of public health degree and is a PhD candidate in epidemiology.

"My selfish reason for doing this is that it's nice to have a practical experience in the community, to balance my book work—that's important for one's own mental health," Rebholz says. "It's important for us to start giving back to the community while we're in school."

Supervised by an attending physician, the medical students see people from all walks of life who have become homeless.



Tulane medical students and their attending physician talk with a patient at the Ozanam Inn, a New Orleans homeless shelter where the students conduct a free healthcare clinic.

One patient, a former physician, lost both his license to practice and his home.

"If you visit the shelter and meet these people, you find that we're all vulnerable and at risk for being in that situation," Rebholz says.

Last year, the clinic conducted a patient survey. Half of respondents said they do not seek medical care anywhere else. Rebholz believes that without the student-run clinic, many homeless people in New Orleans would receive no healthcare services at all. On a typical Sunday, Rebholz dispenses ibuprofen from a large bottle into little plastic lunch bags.

"This clinic is extremely low-budget," Rebholz says. "We need financial support to ensure long-term success. Homelessness influences healthcare costs for our country, and it's costly to our system."

>> Watch highlights of the clinic's work at tulane.edu/empowers/ozanam.cfm.



Meeting with a patient, Dr. Benjamin R. Lee discusses the clinical trial of a new technique that removes prostate cancer without an incision.

TREATMENT ZAPS PROSTATE CANCER WITH SOUND

ulane University School of Medicine urologist Dr. Benjamin R. Lee is conducting a clinical trial of a new, incisionless technique to remove prostate cancer in patients whose cancer has returned following radiation treatment.

High-intensity focused ultrasound, or HIFU, uses ultrasound energy, or sound waves, to rapidly heat up tissue to kill and destroy the cancer cells. The energy is directed via an ultrasound probe through the rectal wall with no incisions through the body, similar to how kidney stones are treated without any incisions.

Ultrasound energy is focused at a specific location and, at that focal point, the temperature rises to almost 194 degrees Fahrenheit in a matter of seconds. Any tissue at the focal point is destroyed, leaving outside tissue unharmed.

"This is an exciting new treatment option for men with recurrent prostate cancer," says Lee, director of the fellowship programs in robotics, laparoscopy and endourology at Tulane. "Typically, surgery for prostate cancer after radiation has a higher risk for side effects since the radiation affects the tissue's ability to heal."

Tulane is participating is a 15-site clinical trial of the HIFU technique along with the University of California-Los Angeles, M.D. Anderson Cancer Center and New York University. Lee is the principal investigator for the Tulane portion of the study.



Dr. Paul Friedlander, chair of the Department of Otolaryngology atTulane, says robotic surgery avoids big incisions and preserves quality of life for throat cancer patients.

NEW TECHNOLOGY AIDS THROAT CANCER TREATMENT

ulane University School of Medicine surgeon Dr. Paul Friedlander is one of the first in the state to perform a new, less-invasive form of robotic surgery to treat head and neck cancers.

The technique, which was recently approved by the U.S. Food and Drug Administration, uses the latest da Vinci three-dimensional, high-definition robotic equipment to make an incision through the mouth to remove tumors without a visible scar. Traditional open surgery to remove throat cancer typically requires a long incision through the jaw and throat.

The new approach has fewer complications, faster recovery and quicker

return of speech and swallowing functions; patients can often avoid chemotherapy following radiation treatment. Patients can be released from the hospital within a day after the new procedure, compared to a week-to-10-day stay following the traditional technique, Friedlander says.

"This is a huge technological leap in terms of treatment," says Friedlander, chair of the Department of Otolaryngology. "Robotic-assisted surgery for tonsil and tongue cancers provides us with greater vision and precision, and significantly improves the patient's quality of life by avoiding the large external incisions and longer recovery times associated with the traditional approaches."

MEDICINE **NEWS**



Color-stained stem cells derived from the fat tissue of a prostate cancer patient may be genetically engineered to act as the "Trojan horse" to fight the cancer cells' growth.

FAT CELLS MAY TARGET TUMORS

ost Americans bemoan an excess of fat. But how cool would it be if one day doctors could use fat cells to fight cancer?

Tulane urology professor Dr. Asim Abdel-Mageed is examining the ability of stem cells from the fat tissue of prostate cancer patients to migrate to and enhance the growth of prostate tumors. The results of his research into the links between obesity and prostate cancer may provide new options for patients and potentially lead to adjuvant therapies to improve the effectiveness of conventional treatment.

Abdel-Mageed's team proposes to genetically engineer the fat cells and use them as a vehicle to deliver an enzyme that degrades the locally produced hormones that encourage prostate cancer to grow. "We will use them as a Trojan horse, so to speak, to specifically target metastatic tumor cells at their sanctuary sites," says Abdel-Mageed.

The incidence and mortality of prostate cancer is twice as high among African-American men as Caucasians and other ethnic minorities, says Abdel-Mageed, who is principal investigator on a nearly \$1 million Department of Defense Health Disparity Research grant supporting this project.

"Obesity is a risk factor for prostate cancer, especially among African-Americans. We wanted to explore its possible role in the disproportionate prostate cancer incidence and progression in this group."

KEEP UP!

For the latest news about developments at the Tulane University School of Medicine, visit tulane.edu/som/news.cfm. And read and sign up for the Dean's Newsletter at tulane.edu/som/dean/index.cfm.



Tulane University School of Medicine teams are seeing increased funding as they

work across disciplines to find solutions to medicine's most challenging questions.

BY KEITH BRANNON | PHOTOGRAPHY BY WILL CROCKER



an yeast cells hold lessons in human aging? Are U.S. infants born with HIV living into a healthy adulthood?

Could a rapid field-testing kit help relief workers stop outbreaks of deadly infectious diseases in West Africa? Can text messages convince diabetics to better manage their blood sugar?

These are just a fraction of the questions investigators ask in more than 147 studies underway at Tulane University School of Medicine. After a record fiscal year for research funding, the school surpassed \$60 million in research dollars.

The full amount—\$62.3 million—is a 45 percent increase from the year before and more than doubles the research dollars from a decade ago. It includes a record-high \$40 million in grant funding from the National Institutes of Health. When the National Primate Center is included, almost \$105 million in medical research projects in the health sciences received support last year at Tulane.

The funding underwrites vaccine development, cancer research, drug studies, new surgical techniques and devices, clinical trials, behavioral therapies and everything in between. The School of Medicine has built a national reputation on core research strengths in infectious diseases, cancer treatment, immunology, heart disease, hypertension, diabetes and organ transplantation, among others.

The funding growth comes at a time when both the school and the state of Louisiana are heavily investing in research infrastructure in downtown New Orleans. Opening later this year are the \$47-million New Orleans BioInnovation Center, a 66,000-square-foot biotechnology incubator directly across from the Tidewater Building on Canal Street, and the Louisiana Cancer Research Consortium, a \$102-million, 172,000-squarefoot state-of-the-art facility on Tulane Avenue for cancer

"Our primary mission is to get research and innovation out of the labs and classrooms at Tulane, where it can have some sort of public benefit and impact."

researchers at Tulane, LSU Health Sciences Center, Xavier University and Ochsner Health Systems.

Tulane is also beginning a \$13.5 million renovation of laboratory spaces in the J. Bennett Johnston (JBJ) Health and Environmental Research Building on Tulane Avenue. The plan will transform traditionally designed lab spaces into large, open and flexible laboratories capable of being immediately reconfigured. "They refer to the design as a ballroom laboratory," says Laura Levy, vice president for research at Tulane University. "It's a great big open laboratory without walls." Five newly built labs in three floors of the building will house researchers from the schools of Medicine, Science and Engineering, and Public Health and Tropical Medicine. The lab renovations are expected to begin during 2012.

With researchers from different schools and disciplines working close to each other in the reconceived labs, ideas can cross-pollinate between projects, sparking innovations. "A strategic direction for us is interdisciplinary research," Levy says.

The goal is to enhance the school's research output by involving investigators in the physical sciences and engineering. For example, Dr. John Clements, professor and chair of microbiology and immunology, will work with Dr. Vijay John, professor of chemical and biomolecular engineering, to study materials that might release a vaccine through a patch applied to the skin. Other examples include teams exploring materials that allow surgeons to close wounds in a bacterial-infection-resistant way, and microbiologists studying tissue scaffolding in healing who are pairing with biologists researching the genes for tissue regeneration in salamanders.

In November, most of Tulane's core cancer research resources will move from the JBJ Building into new labs in the Louisiana Cancer Research Consortium (LCRC). Tulane will occupy two floors—about 50,000 square feet—of the 10-story building. Cancer Center Director Prescott Deininger says the new center will help Tulane attract new funding and top talent. "It will be a pretty exciting environment," he says. "The space is magnificent for recruitment."

The New Orleans BioInnovation Center is slated to open this summer. The facility, designed to lure biotech investment to New Orleans, will help Tulane researchers partner with entrepreneurs to commercialize their discoveries. At least four startups based on School of Medicine research are poised to move into the center,

> says John Christie, executive director of Tulane's Office of Technology Transfer and Intellectual Property Development. Christie's office helps investigators patent their advances and license those innovations for commercial applications.

Startups based on research from the School of Medicine include NuMe Health, a biotech company focusing on medical foods; Orthopeptide Biotechnology LLC, specializing in bioactive peptides

for inflammatory diseases of the kidney and nervous system; EnVivatech LLC, based on peptide compositions and methods for inhibiting herpes virus infection; and WiBi Works, based on a stem-cell therapy targeting inflammation.

NOvate Medical Technologies is a startup led by med student William Kethman. Kethman is a developer of SafeSnip, an inexpensive surgical device to cut, clamp and disinfect umbilical cords for births in developing countries. (*See story, page 2.*)

"For Tulane, we've got an unprecedented wave of startup activity," Christie says.

AT A GLANCE: Research Statistics

\$62 MILLION School of Medicine research funding in

^{\$}43

fiscal year 2010.

MILLION School of Medicine research funding in fiscal year 2009.

PERCENT one-year increase in total research funding dollars.

147 studies underway at the School of Medicine.

Studying Kids Born With HIV

One of the largest long-term efforts to study children born with HIV in the United States is under way at Tulane. **Dr. Russell Van Dyke**, professor and chief of the section of pediatric infectious diseases, is the principal investigator of one of the two NIH grants that fund the \$12 million, 10-year Pediatric HIV/ AIDS Cohort Study, which tracks 451 adolescents and teens with perinatal HIV.

Most children in the study, who have been HIV-infected since infancy, are doing well into adolescence and adulthood, according to results presented recently in the *Journal of Acquired Immune Deficiency Syndromes.*

"About two-thirds of these kids, at this point, don't have virus detectable in the blood," Van Dyke says. "While they are still infected and they are not cured, it's surprising how well they're doing, considering what they've been through."

The study looks at the effects and complications of a lifetime of infection and treatment. So far, earlier treatment is resulting in better immune outcomes, at least initially, with many fewer infections and other complications of HIV infection.

"We're not seeing the deaths we used to see due to infections, but we're starting to worry about longer-term complications," Van Dyke says, noting that they range from coronary artery disease to neurological and cognitive problems. "Some of these complications may be related to the HIV itself, or some may be related to the medications these kids are on."

He expects many of the patients will have a normal or near-normal life span as HIV is treated as a chronic condition, more akin to diabetes or heart disease.

"These kids are doing very well," Van Dyke says. "They're going to school and doing all of the things that kids should do. Hopefully, they will be living 50 or 60 years or more, so what's going to happen 40 years from now is the real concern."

The study is also following 2,480 uninfected children whose HIV-positive mothers took anti-viral medication during pregnancy to prevent them from passing on the disease, to see whether these treatments had any lasting effects or complications. –Ryan Rivet

"THEY'RE DOING WELL."

Dr. Russell Van Dyke, left, leads a longitudinal study with team member, Medea Jones, RN, to follow the health of children born with HIV.



Fighting an African Epidemic

Dr. James Robinson, professor of pediatrics, leads a \$15 million, NIHfunded project to study how the immune system fights Lassa fever. The disease infects 300,000 to 500,000 people each year across West Africa, resulting in some 5,000 deaths.

Little is known about why some are able to fight off the virus and others are not, Robinson says. He and **Dr. Robert Garry**, professor of microbiology and immunology at Tulane, are studying patients who contracted the virus but recovered, isolating antibodies to see how they might play a role in the development of a vaccine or treatment.

"This study will result in a fundamental understanding of the mechanisms of antibody responses and how they neutralize the Lassa virus," Robinson said. "We have assembled a very strong and diverse group of institutions to collaborate on this project."

The National Institute of Allergy and Infectious Diseases awarded the five-year grant to Tulane last year. It includes collaboration among the Scripps Research Institute; the Broad Institute; Harvard University; the University of California at San Diego; Boston University; Autoimmune Technologies, LLC; Corgenix Medical Corporation and various partners in West Africa.

In areas of Sierra Leone, up to 16 percent of people admitted to hospitals have Lassa fever. In its occasional epidemics, the fatality rate can reach 50 percent. The virus is also classified as a potential bioterrorism threat.

Garry, program manager of the vaccine contract, also has a \$7 million NIH grant to develop a diagnostic kit for relief workers to quickly detect cases of Lassa without sending blood samples to remote labs.

"We have been very pleased with the results of our research efforts over the past five years," he said. "The diagnostic products we have developed have been shown to be remarkably effective in clinical settings in Africa. They will not only have a meaningful impact on health care in that part of the world, but will also fill a critical gap in bioterrorism defense.

"Now under the new NIH award, we will move to the next level, allowing us to better treat the disease or ultimately prevent it altogether."

LASSA AND THE IMMUNE SYSTEM Dr. James Robinson (left) and Dr. Robert Garry see hope for better diagnosis, treatment.



Networking for Hypertension Clues



A promising young Tulane researcher will learn from some of the world's brightest minds this summer. MD/PhD student **Catherine Howard** was one of only 80 U.S. students selected to attend the prestigious Nobel Laureate Meetings at Lindau, Germany. She will spend a week with 26 Nobel Laureates and 570 other young researchers from 80 countries.

An invitation to the meeting is a tremendous honor extended only to junior researchers that show great promise in their fields, says Dr. Gabriel Navar, professor and chair of physiology.

Mentored by Dr. Kenneth Mitchell, associate professor of physiology, Howard studies experimental models of hypertension to investigate micro-surgical procedures on kidney function in animal models and the impact of Aliskiren, a new drug for high blood pressure.

Howard says the Lindau meeting is unique because it is designed to promote a lot of interaction between researchers. "I'll get to pick the brains of people who have literally formed the way that we think. It's incredible."

Howard has long known she wanted to study hypertension, a big problem in her hometown of New Orleans. Hypertension and heart disease are the No. 1 killers in the U.S. Despite more than 200 drugs that treat the conditions, the problem continues to grow.

"There is something big that we are missing," she says. "It's a simple problem to understand but an unbelievably complicated one to solve."



NEW WEBSITE IS GATEWAY TO CLINICAL TRIALS

The School of Medicine has launched a volunteer research registry to help investigators recruit patients for clinical trials and research studies. At the site - www.vrr.tulane.edu - patients fill out a single online registration form indicating the research study areas of interest, such as obesity, hypertension, heart disease or diabetes. Information then goes into a database for clinical coordinators at Tulane. "It's a great way of putting volunteers and researchers together," says Roberta McDuffie, who spearheaded the project. "We anticipate that this will broaden our volunteer base tremendously." The goal is to grow the database into a vital resource for Tulane researchers. As Tulane incorporates unified electronic medical records, patients can have their information automatically added to the system. In the meantime, Tulane clinics have hard-copy applications for those who don't have access to a computer or the Internet.

RESEARCH SPOTLIGHT Text Reminders Aid Diabetics

For most of us, it's the gadget that's never far away. But, for diabetics, could the cell phone be the key to keeping their blood glucose in check?

That's the question Dr. Vivian Fonseca, Tullis-Tulane Alumni Chair in Diabetes, asks in a new study that uses computer software and text messages to help diabetics manage their blood sugar. In the study, 50 diabetics will get daily reminders to text in the day's first blood sugar readings. If the readings are out of range, a computer system alerts endocrinologists who monitor the patients' progress. The system evaluates their readings based on standardized algorithms and can advise the patient to adjust insulin doses if needed. If glucose readings are dangerously high, the system will automatically have an operator call the patient to get him or her on the line with hospital emergency staff.

Researchers are evaluating whether the system helps patients improve their hemoglobin A1C levels over a six-month period, says Roberta McDuffie, director of clinical research for endocrinology and Tulane's Heart and Vascular Institute. "This study is very much in line with the current trend in diabetes management, which is to look for ways to improve people's management that are easily accessible for the patients," she says. Doctors can only do so much; research shows that more than 90 percent of a patient's diabetes outcome is related to self-management. Because shifts in blood glucose over time may not be easily detectable to patients, they can let their monitoring slip. "Patients know the right thing to do...they just don't do it," McDuffie says.

Patients in the study can send in as many blood glucose readings as they want each day. They also get periodic tips to help them manage their condition better. For example, during the holidays patients got a reminder that alcohol can cause low blood sugar, so it's a good idea to eat before having a drink at a party.

Is the method working? So far, early results are promising. The daily check-ins and reminders have kept Kim Delaney, a nurse at Tulane, more vigilant about testing her blood sugar. "I think it guilts me into doing it more often than I probably would," she says. "Just knowing that I've got to text it in has made me get into the habit of doing it more often."

The Remote Diabetes Monitoring Study is funded by investigator-initiated grants from the pharmaceutical industry and MedAdherence LLC, which developed the software for the study. Fonseca hopes to expand the program to test whether it can improve drug compliance for patients with other chronic conditions.

TEXTING FOR HEALTH

A simple message reminding diabetics to check their blood sugar numbers regularly is a focus of the Remote Diabetes Monitoring Study.













Above: Medical education is vastly different today than it was in 1959, when Dr. Alton Ochsner led the Senior Surgical "Bull Pen" at Charity Hospital.

Left: Dr Kevin Krane (left) and Dr. Marc Kahn have led many of the initiatives at Tulane University School of Medicine. Some of those new approaches are depicted in the accompanying photos.











Medical education has been *transformed* in the last quartercentury. Tulane University School of Medicine has won national accolades for its *thoughtful* and timely *innovations*.

BY DIANA PINCKLEY

hen Dr. Marc Kahn attended the University of Pennsylvania School of Medicine 25 years ago, the focus was on the individual—in health care delivery and physician education. Now, according to the senior associate dean for admissions and student affairs at Tulane University School of Medicine, the emphasis has shifted to supporting healthier populations through medical teamwork. And the economics of medical education and patient care continue to capture attention.

"When I was in medical school, we thought emerging technologies were able to change the world. We had one of the first MRI units at Penn, and we were enthralled by the potential for specific treatments for specific cancers," says Kahn, a practitioner in hematology/oncology, a teacher of medical students and a leader in academic medicine.

"Not that those things aren't important—but the great changes in health are imparted through public health. We didn't realize then that small things in large populations—vaccination, healthy diet, healthy lifestyles—can really make a difference."

Medical curricula has adapted to give more attention to keeping many people healthy, Kahn says, as well as emphasizing teamwork and outreach into the community. In many of those initiatives, the School of Medicine is leading the way.

a changing ENVIRONMENT

INNOVATIVE PATHS TO MEDICAL SCHOOL

In the last few decades, medical student debt levels have soared to an average of more than \$172,000 per student nationwide not counting any undergraduate loans. "Anything we can do to decrease student debt is important," says Kahn.

Addressing that issue is the new Tulane Accelerated Physician Training Program (TAP-TP 6+1), now in its second year. The first of its kind in the nation, the program combines six years of schooling with one year of community service. It has the potential to change medical education nationwide.

"In most of the world, with the exception of the U.S., you go to medical school after high school," says Kahn. "We wanted to set up a program that will get people through school faster." But students should also have a certain level of maturity, so the program's developers added the year of public service. While more than 30 American universities offer six- or seven-year programs, the Tulane program is the first to have a mandatory year of public service built into the curriculum

Honors students apply for the highly competitive program in their freshman year at Tulane. After two undergraduate years, they spend a year in public service through Americorps/VISTA and Tulane's Center for Public Service in organizations unrelated to health care. Then they begin the four-year curriculum at the School of Medicine.

A total of 10 students are enrolled in the TAP-TP 6+1 program; interviews for the third class were held this spring. The Creative Scholars honors program, designed to majors do at least as well in medical school as science majors," says Kahn, adding that the program—also the only one of its kind—helps improve diversity.



THE TEAM APPROACH

Teamwork has emerged as the key to success—in medical school and in helping assure patient safety during a physician's practice.

"The particular skills that future physicians should have include a high level of functioning in a team setting and the ability to work in an interprofessional manner," says Dr. Kevin Krane, professor of medicine and vice dean of academic affairs at the School of Medicine, who is a national leader in implementing team-based tools in medical education.

"Students function more effectively when they work in teams. In the last two or three years, we have begun to implement initiatives in the curriculum that will move us in that direction."

One such initiative, introduced in January 2011, is a patient safety unit teaming first-year medical students with nursing students from Delgado School of Nursing; Krane hopes to add pharmacy students in future offerings. In anatomy, six-student teams are graded on their ability to evaluate fellow team members,

as well as on their grasp of the subject.

Team-based learning, another tool, moves students away from standard lectures to what Krane describes as an active learning format. "They are given resource materials to learn before they come to class," he says. "Class time is spent with students working with teams in the application and actual use of knowledge they've gained, guided by faculty. It fosters deeper learning."

"Prior to Hurricane Katrina, a lot more education took place in hospitals; now it's a lot more community-based. Residents, house staff and students should be part of the community; that's where primary care is best practiced."

increase the enrollment of non-science majors, is another route to medical school pioneered by Tulane. Tulane students with a 3.6 grade point average who have completed course requirements by the end of their sophomore year apply. Those accepted—one to 14 per year—major and complete an honors thesis in a non-science area.

"If we look at the educational data, we find that non-science

Sessions are held in the DeBakey Educational Center, on the second floor of the Murphy Building on the medical school campus. Named in memory of Dr. Michael DeBakey (M '32), "it's the perfect facility for team-based learning," Krane says.

The new focus is sometimes challenging for students who are used to sitting in lectures, memorizing facts and focusing on individual excellence, he adds, and it requires a lot of work on

"Medicine is a team sport and is becoming even more so. It's our job to give students those skills." –DR. KEVIN KRANE

the part of faculty to prepare the learning modules. "The data indicate that when material is taught in a team-based learning format, students perform better on exams. Published clinical studies show the ultimate benefit is improved patient safety."

Krane is also working to develop a new community health clerkship, required for fourth-year students, that will focus the team approach on the social determinants of health.

Teams and technology find synergism just one floor above the DeBakey Center, in the third-floor home of the \$3-million, 14,000-square-foot Tulane Center for Advanced Medical Simulation and Team Training, which opened in January 2009.

Medical students and other healthcare providers learn the latest techniques and best practices for patient care and safety, while they move as teams through initial assessment in an ER, to procedures in the OR or Labor and Delivery, and end with long-term care in the ICU or patient hospital room—in a real-life environment.

The Sim Center was recently accredited by the American College of Surgeons (ACS) as a Level I Comprehensive Education Institute. Each year, it logs more than 2,000 formal visits from medical students and more than 3,000 from all users.

FROM TULANE AVENUE TO THE ROAD

Training for medical students has broadened in geography as well as content and delivery style, as it reaches into communities throughout Louisiana.

"Prior to Hurricane Katrina, a lot more education took place in hospitals; now it's a lot more community-based," Kahn says. "Residents, house staff and students should be part of the community; that's where primary care is best practiced."

Students work in the many community health clinics in which the medical school is involved. "We've had a public service requirement for over 20 years," says Kahn. One of the oldest in the country, it requires students to volunteer 20 hours a year, but most average considerably more.

A new satellite Tulane School of Medicine campus at Baton Rouge General Hospital hosts third-year students; 13 joined the program in the fall. The Tulane Rural Immersion Program, begun in 2010, sends a few students to spend their entire third year working with physicians in rural communities.

In 2011, the School of Medicine was recognized for its community outreach efforts with the Spencer Foreman Award, the highest public service award from the American Association of Medical Colleges (*see page 3*).

COST VS. VALUE

Kahn, who also holds a master of business administration, is a national expert on the economics of medical education. In a recent presentation called "Academeconomics," he and his coauthors indulged in a little myth-busting.

MYTH #1: Medical schools can increase revenue by

increasing class size. Busted. The average cost of educating one medical student for one year is \$62,877, according to Kahn, some \$10,000 more than the average income from tuition, government contributions and gifts. "Increasing class sizes by 30 percent [as many organizations have suggested] will require at least \$5 million of additional revenue," the study found.

MYTH #2: Rising debt clearly affects medical student career choices. Plausible. Kahn's studies have shown no debt-based bias away from primary care toward higher-paying specialties, but other research has indicated that it is a factor.

"We have to be conscious of student debt," says Kahn. "The scary thing is that people from lower socioeconomic groups are not going to med school. It's becoming a career for those whose parents are in the top quarter of income earners in the country because of the tremendous debt incurred. People in the top quartile understand that it's okay to borrow money for business, because that's what a medical education is. But we're scaring those students whose families are not in the top quartile—the students we most need in the medical profession."

The economic value of a medical education continues to outweigh the cost over the longer term, but in the short run, the picture can be more challenging.

The cost of four years of Tulane School of Medicine is almost \$300,000, of which \$210,000 represents tuition and fees, Kahn says. About 87 percent of students have some form of financial aid, but it averages only \$15,000 a year. And there are very few scholarships. "We have to encourage those people who can to help us with scholarship aid," says Kahn.

>> To find out how to help underwrite scholarships for medical education, contact David Kinahan, vice president for development, kinahan@tulane.edu or 504-314-7635.







JUST AS THE EYES ARE THE MIRROR OF THE SOUL, the skin reflects the body's general health—or the systemic diseases that threaten it.

Dr. Erin Boh, who chairs the department of dermatology at Tulane University School of Medicine, specializes in treating complicated, chronic diseases like severe psoriasis and cutaneous t-cell lymphoma. Unlike most dermatologists, who find scant need for listening to hearts and lungs, she uses her stethescope every day in her medical dermatology practice.

"Psoriasis responds exquisitely to stress—by getting worse," says Boh, who earned a Tulane PhD in biochemistry in 1980 and her Tulane MD degree in 1985 before joining the faculty in 1990. "For example, in atrial fibrillation, when the patient's heart is not functioning correctly, it puts stress on the body."

She smiles as she remembers her diagnosis of atrial fibrillation in a patient whose psoriasis had become severe after years in a controlled state. She called his cardiologist to report her findings. "He said, 'I didn't know a dermatologist owned a stethoscope!' He couldn't believe I knew what atrial fibrillation was. He was very impressed."

Referring physicians and the patients who come from throughout the Gulf Coast and South Central states are impressed as well. Boh and the six other members of the department use treatment methods that are the most advanced available between Birmingham and Houston.

Tulane dermatology clinics—at Tulane Medical Center, in Covington and at the VA Hospital in Biloxi—see about 1,000 patients a month. In addition, others are seen in clinics at the Medical Center of Louisiana/New Orleans.

LEADING-EDGE APPROACH TO COMPLEX CASES

Many of Boh's patients suffer from psoriasis, a disease that can be difficult to treat. About 2 to 3 percent of the population copes with the condition. "It's a tremendously uncomfortable disease," she says. "Patients can be itchy from head to toe." There is no cure, but, with treatment, some patients remain symptom-free for years.

Then things can change. "Psoriasis can be totally stable, and out of the blue it becomes totally unstable," she explains. "Maybe psoriasis patches are just on elbows or knees for years, but now 80 percent of the body is covered. That's how people get sent to us. And we have to think about what triggered it."

Boh and her team use those stethoscopes along with other tools to screen for systemic disease, and they have found undiagnosed prostate cancer, breast cancer or lung cancer in some of their patients.

"Most people who have a flareup do have some stress," Boh says. "But most of the time it's a lost job or a new baby—not cancer."

Boh is active in the national psoriasis circles, where she is an acknowledged expert. She directs the research symposium for the National Psoriasis Foundation and is deputy editor of the foundation's magazine.

The department has six to 10 clinical research studies underway at any given time. An eight-year longitudinal study looks at co-morbidity factors in psoriasis—including arthritis, heart abnormalities and metabolic syndrome. Another project is evaluating a biologic to treat psoriatic arthritis.

Boh is also investigating a chemical that can block an enzyme called Janus-kinase-1 inhibitor that, in turn, is pivotal in the activation of T-cells. Once those T-cells are activated in a person

"It's easy in a medical specialty to forget there's a

In medical dermatology, we have to deal with the

whole person associated with those eyes or that skin.

whole person and the other diseases they have."

Other studies are examining a substance which blocks the whole T-cell activation process.

Boh also works with Tulane oncologists in a cutting-edge treatment for a form of non-Hodgkins lymphoma. Tulane is the only site in Louisiana using extracorporeal photopheresis (ECP) to treat cutaneous T-cell lymphoma and graft-host disease. "We have a special bent for this rare form of lymphoma that arises spontaneously in the skin," says Boh, noting that only about 100 such machines are in use in the United States.

The approach of ECP is similar to dialysis, separating T-cells from a patient's own blood and incorporating psoralens into the cells, substances that make the T-cells more sensitive to the UVA light treatment as they pass through tubing. As the psoralens embed into the T-cells' DNA, "it changes the appearance of the T-cells so that the body believes they're invaders," explains Boh.

"We put the cells back into the patient and the patient's own immune system now sees cells as different. So it goes to work to get rid of them."

ECP is easy for the body to tolerate, Boh says. Patients who are treated with ECP are not sick and not immunosuppressed as a result of the treatment. "It's a very selective immunomodulating target. Patients' immune systems carry out the definitive response. And, in many cases, their disease goes into remission."

MORE SPACE FOR "STRONG DERM FAMILY"

Boh, an international specialist in photopheresis who has chaired the dermatology department since 2006, says that a planned move in June to new facilities in the Murphy Building (131 S. Robertson) from cramped quarters on the 15th floor of the Tidewater Building (1440 Canal) will offer more space to pursue clinical research.

She takes pride in what she calls "the strong derm family" at Tulane. "Our alumni come back to teach the residents," Boh says, giving accolades to the department's strong clinical faculty as well as its full-time academic physicians. "They're big names, nationally

recognized leaders."

Four residents a year graduate from the program. Some go into practice in distant regions; others stay in the New Orleans area. Wherever residents choose to begin their careers, they are ready to go full steam ahead into practice.

"It's easy in a medical specialty to forget there's a whole person

associated with those eyes or that skin. In medical dermatology, we have to deal with the whole person and the other diseases they have," Boh says.

-DR. ERIN BOH

"When our residents get out, they're well-equipped to do that. They're challenged that way. They get very good, well-balanced training—a lot of surgery, a lot of cosmetics. They get everything

with psoriasis, the whole immune system is turned on, the inflammatory cytokines that relay messages between immune system cells go to work, and skin lesions, arthritis, insulin resistance and heart issues can result. "This study will look at patients of all ages, whether their previous treatment has been systemic or topical, and see the impact of the drugs," she explains.



they need to complete the residency and be board-eligible, but they also get that little extra."

THE MAKING OF A DERMATOLOGIST

Holder of the Joseph Chastain Professorship of Clinical Dermatology, Boh herself brought a little extra to her medical career, after earning a PhD in biochemistry where her research focused on chemiluminescence and photobiochemistry. "Even in the fifth grade, all I wanted to do was get a PhD," she says, "It didn't matter so much in what."

After graduating in December 1973 from Auburn University, the New Orleans native had nine months to fill before beginning a graduate program in entomology at LSU.

The first day she was home, her dad informed her she had to get a job. "He told me to go to Tulane and LSU med schools to look for work. I was sent to Dr. Norberto Schor, a professor of pathology, who is from Argentina and his accent can be a bit tough. At the end of my interview, he said, 'You seem to understand me!' So he hired me and I started working in pathology doing bench research."

When Dr. Schor told her he could help her pursue a PhD at Tulane, she selected biochemistry partly for convenience: Classes

were held on the same floor as the lab where she worked. But soon it became her passion.

After she earned her doctorate and completed a year's fellowship supported by the American Heart Association, she started thinking about medicine. "I didn't have a job. One day I'm sitting in the cafeteria with Dr. Bob Garry, a professor of immunology and microbiology, who said, 'You can teach medical students, so go to med school. You'll have a job.' I really had no clue what it was about, except I would have a job.

"I remember vividly—even what I was wearing—the day it hit me in 1981 that I'm really supposed to be a doctor. Dr. Jim Storer, a pediatric dermatologist and neonatologist, gave a lecture in a freshman histology course on autoimmune blistering diseases in children. Sitting in the lecture—talking about biochemistry and molecular biology—I thought 'I'm going to be a dermatologist.'

"I never wavered from that point forward. It all fell into place. It's the best direction I ever had in my life."

Boh, who went to medical school a bit later than most, keeps in close touch with her classmates, hosting a recent reunion dinner for Tulane Medicine Class of '85 at her home.

"Never for a moment have I been able to think of anything else I'd like to do. There's nothing I would do differently. Even if I won the lottery, I would still do this."



\$1.9 Million Brinton Family Gift Strengthens Community Clinics



MARY JANE DEERE WIMAN BRINTON was watching news coverage of the Deepwater Horizon

Deepwater Horizon oil disaster one evening with her son Bill when she turned to him and said, "I

want to do something down there. I want to make a donation to help those people."

The Brintons, long known for their extensive philanthropic support of health care, mental health and education in California, had no real previous connection with New Orleans or Louisiana.

So Mrs. Brinton, 88, dispatched Bill and his wife Gerry from San Francisco to the Crescent City, where they talked to 18 organizations to find the best place to make a difference.

The result: a \$1.9 million gift to the Tulane University Community Health Centers, to help provide primary care to low-income members of the community and hands-on experience for physicians and others who are training to work in healthcare careers. In addition, part of the Brinton gift will help develop a model, replicable community health and nutrition education program.

"The Brinton family's vision for helping the New Orleans community was perfectly aligned with Tulane's commitment to public service," says Yvette Jones, executive vice president for university relations and development at Tulane.

"This extraordinary gift will touch the daily lives of thousands in our community by enabling us to provide expanded high quality services and access to new health education and nutrition programs. We are grateful to Mrs. Brinton and her family for being our partner in this exciting new initiative."

Nine community health centers,

Most of the adults are overweight or obese, and the majority manage some chronic disease.

Supported by the Brinton family's gift, the School of Medicine will

• ESTABLISH AT LEAST ONE NEW HEALTH CLINIC, with expanded services, that will reach 7,000 people in two years.

• ENHANCE WORKFORCE DEVELOPMENT AND TRAINING, including a mandatory clerkship for medical students in community health with a focus on

"We wanted an organization with a vested interest in the future of the community that could execute a plan with a high degree of success and have an impact on a lot of people reasonably quickly."

-BILL BRINTON

including four mobile units, offer neighborhood-based primary and behavioral health care to 18,000 individuals. The centers provide approximately 2,000 patient-visits per month. Although most clients come from working families, about two-thirds of the patients are uninsured. All are seen regardless of their ability to pay; most contribute through a sliding fee scale. the social determinants of health care; internships for high school students planning health careers; and, in partnership with Delgado Community College, training for community health workers. • DEVELOP A COMMUNITY HEALTH AND NUTRITION EDUCATION PROGRAM housed in a new "Brinton Family Health and Healing Center" to improve the access of patients with chronic diseases to healthy food and exercise options as well as helpful community resources.

"We wanted an organization with a vested interest in the future of the community that could execute a plan with a high degree of success and have an impact on a lot of people reasonably quickly," says Bill Brinton. "We think we picked the right people. Tulane met all the tests—we certainly gave a lot of them—and came out with straight A's on all fronts."

When Mary Jane Brinton sent Bill and Gerry to New Orleans, she knew time was of the essence. "Because it was August and hurricane season, I asked her if we could do the visit a little later," he says. "She told me that if we couldn't do it then, she'd find someone who could."

Mary Jane Brinton died in San Francisco last November, shortly after the gift was finalized. "She kept saying how proud she was of the gift to Tulane," her son adds. "She knew it would help a lot of people."

WHAT YOUR GIFT CAN ACCOMPLISH

The lives of countless individuals are enriched each day by School of Medicine supporters who are committed to providing our community with the finest health care possible. Our ability to prevent infection, treat disease and keep saving lives depends on individual donors who embrace our mission. Last year, alumni, parents and friends made contributions in support of our work. Thank you. Your continued generosity will help us accomplish amazing things. Here are some examples.

\$1000 covers flu vaccines for 20 children, keeping them healthy and in school and helping parents stay at work. When students skip just one day of school, they can miss up to 20 percent of the instructional material taught that week.

\$4000 provides one adult a full range of comprehensive primary and behavioral health services for one year. Regular visits to the doctor help patients avoid expensive emergency-room visits while taking advantage of services catering to their healthcare needs, such as screening and diagnostic exams, medication management, counseling and referral management. one computer for patients to use while waiting for the doctor at the community clinic. Located in a central area, open-access computers connect patients to their medical records via the Patient Portal and allow them to manage, track and update their healthcare information.

\$3,000 dispatches the Mobile Medical Unit and a team of medical experts to a community in south Louisiana in need of primary care services. Bringing health care directly to the people is the most effective way to prevent costly—and sometimes deadly problems later.

\$5,000_{st}

the clinic with medical supplies for six months, providing necessary materials to support high-quality services to 7,000 patients. Supplies range from basic cotton swabs and thermometer covers to more expensive laboratory and diagnostic supplies.

\$10,000 provides laboratory services for 500 patients. Services include hemoglobin tests to monitor diabetes, a complete blood count to assess infection and hepatitis screening to determine liver function. All tests help physicians confirm diagnoses so they can develop the most effective

and efficient treatment plans.



Honored with top Tulane

Medical Alumni Association awards in the fall were a renowned cardiologist at the University of Oklahoma Health Sciences Center and a leading Mobile, Ala., surgeon with four children who are Tulane University School of Medicine graduates.

OUTSTANDING ALUMNUS AWARD Dr. Ralph W. Lazzara ('59)

Dr. Lazzara is recognized for his career accomplishments and excellence in the medical profession. As director of the Heart Rhythm Institute of the University of Oklahoma Health Sciences Center, he remains fully active in clinical care and teaching.

After graduation, he did a residency and fellowship in internal medicine and cardiology at Tulane, followed by a fellowship in electrophysiology at Columbia University College of Physicians and Surgeons. He returned to Ochsner Clinic and Foundation Hospital, where he had interned, as staff cardiologist and director of cardiovascular research from 1965-1967. After three years in the U.S. Army, Lazzara became a leading cardiologist at the University of Miami and its affiliated hospitals. He moved to Oklahoma as professor of medicine and chief of the Cardiovascular Section at the University of Oklahoma Health Sciences Center where he served from 1978–1998. Lazzara then took over leadership of the Heart Rhythm Institute.

His research has centered on basic and clinical cardiac electrophysiology, with general themes including the clarification of mechanisms of various kinds of cardiac arrhythmias and the development of new therapeutic modalities, primarily in the field of M of pharmacotherapy and radiofrequency catheter ablation for cardiac arrhythmias.

He is OU Regents Professor of Medicine, the Natalie O. Warren Professor of Medicine, the George Lynn Cross Research Professor, and honorary professor of medical ethics at Xinjiang Medical University in Xinjiang, PR, China.

C.D. TAYLOR AWARD Dr. Andrew Damrell Burch Sr. ('60)

Dr. Burch is recognized for his many contributions to the medical health of his community. In private practice in Mobile, Ala., for the last 44 years, Burch has performed more than 20,000 surgical procedures. He adheres to a philosophy of providing exceptional health care to any individual in need, regardless of ability to provide compensation for those services. He is an excellent role model for thousands of Alabama youth, including his own nine children.

Following a general surgery residency in New Orleans and a thoracic and cardiovascular fellowship at the Ochsner Medical Foundation, Burch returned to his native Alabama to start a private practice.

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**.



Dr. Ralph W. Lazzara (left) and Dr. Andrew Damrell Burch Sr. (right) with Dr. Benjamin P. Sachs, dean of the School of Medicine.

He has been deeply involved in community and civic activities as founding president of the Parochial League Coaches Association, founding president of the McGill Club and co-founder of the Yellow Jacket Club. He has been a member of the boards of the Allen Memorial Home, the McGill-Toolen School and the Mobile Chapter of the American Red Cross. A past president of the Red Elephant Club, he was selected to receive the 2001 Paul W. Bryant Alumni-Athlete Award by the University of Alabama National Alumni Association. Burch joined former teammate and Pro Football Hall of Fame member Bart Starr in this elite group.

All four of Burch's sons and his youngest daughter are physicians, as are three of his daughters-in-law. There are nine Dr. Burches in his family. Four offspring graduated from Tulane University School of Medicine: Dr. Ernest George Burch ('95), Dr. Daniel C. Burch ('00), Dr. Thomas M. Burch ('00), and Dr. Patricia Burch ('04). Dr. Andrew D. Burch Jr., Dr. Ernie Burch and Dr. Danny Burch are surgeons in Mobile and perform surgery daily with their father. Dr. Trica Burch practices internal medicine in Mobile; Dr. Tommy Burch is a pediatric cardiac anesthesiologist on the faculty at Wake Forest Medical School in North Carolina.

Dr. Gregory S. Ferriss practices sleep disorder medicine in New Orleans and is a clinical faculty member at Tulane University School of Medicine.

Dr. George R. Carey Jr., an orthopaedic surgeon in New Orleans for 45 years, has lived in Atlanta since Hurricane Katrina. During his retirement, he continues to be active with the local orthopaedic community. He also serves on the advisory board of the Shepherd Center, a leading brain and spinal cord center.

Dr. R. Teryl Brooks Jr. is a full-time instructor in anatomy and physiology at Southeast Arkansas College in Pine Bluff.

Dr. James B. Madison III has retired after 43 years in private orthopaedic surgery. He served a two-year academic assignment in Miami and Ecuador, with 14 years at Project Hope. He now volunteers at Shepherd's Hope in Orlando.

Dr. Benjamin B. Ferdon is enjoying retirement from his practice of internal medicine in Raleigh, N.C. He volunteers with an open-door clinic at the Urban Ministries of Wake County.

Dr. Florence E. Jones recently retired as medical director of Health Care for the Homeless Clinic at the City of New Orleans Health Department.

Dr. Robert L. Kandell, a pediatrician in Port Washington, N.Y., and a clinical assistant professor at Cornell University Medical College, has traded in his office shingle for a toll-free phone number and website to answer questions and give free pediatric medical advice to parents. "Dr. Bob" conducts questions and answers the old-fashioned way—in a telephone conversation at his personal toll-free phone number, 1-877-KIDSDOC. For information, visit askthepediatrician.com.

Dr. Frank S. Mancuso retired from Lakeview Medical Center in Suffolk, Va., on August 29, 2009. He practiced general pediatrics in the western Hampton Roads, Va., area for 41 years.

Dr. John W. Youngblood Jr.

was named clinical professor of otology-neurotology, Department of Otolaryngology, Head and Neck Surgery, University of Texas Health Science Center at San Antonio. He was also elected vice president of the Southern Section of the Triological Society.

Dr. Mathis I. Becker retired from clinical practice in thoracic surgery and has become the director of professional relations and administrative liaison to the vice dean for clinical affairs at the University of South Florida College of Medicine in Tampa.

Dr. Francis J. Selman Jr. retired from his urology practice in 2007. Since then he has been working as a volunteer physician and clinic medical director at the Bethesda Free Health Clinic of D'Iberville (Miss.).

Dr. James M. Duncan has retired from the active practice of gastroenterology in San Antonio. **Dr. George W. Meyer Jr.** is governor of the Northern California Chapter of the American College of Physicians. He practices gastroenterology in Sacramento.

Dr. Russell W. Steele, who has a practice in infectious diseases and pediatric allergy and immunology at Ochsner Clinic in New Orleans, was elected counselor of the Tulane chapter of Alpha Omega Alpha medical honor society.

Dr. Dexter Louie has served as chairman of the board of directors for the California Medical Association Foundation for the last two years. Louie is an otolaryngologist in private practice in San Francisco.

Dr. Edward L. Soll and colleagues opened their newest office, Doctors Imaging Services, on Magazine Street in New Orleans. Their first office is in Metairie.

Dr. Timothy J. Triche (G '71), professor of pathology and pediatrics at the University of Southern California Keck School of Medicine, has been named to the scientific advisory board of WaferGen Biosystems Inc., a leading developer of state-of-the-art genomic analysis systems. As director of the Center for Personalized Medicine at

FACILITY DEDICATED TO SPORTS MEDICINE LEADER

Dr. Joseph G. Spracher ('64), a Stockton, Calif., physician who became a pioneer in sports medicine, continues to provide medical care to multiple generations of athletes and weekend warriors. His efforts were recognized in December when the University of the Pacific, his undergraduate alma mater, unveiled the Dr. Joseph Spracher Athletic Training Facility at the Pacific Intercollegiate Athletic Center and announced the Dr. Joseph Spracher Endowment that will provide an annual scholarship to a Pacific student-athlete majoring in sports science. Spracher served as team physician at Pacific for three years and worked with Stockton high school athletic teams. He has helped to transform the practice of sports medicine, changing the ways in which coaches treat injuries and how they approach conditioning.

FACULTY NOTES

Dr. David W. Busija has joined the Department of Pharmacology as Regents Chair and professor. He received a PhD from the University of Kansas and was a post-doctoral fellow at the University of Iowa Cardiovascular Center.

Dr. Byron E. Crawford II, vice chairman of the Department of Pathology and Laboratory Medicine, director of anatomic pathology and director of medical education, received the 2011 Michele Raible DistinguishedTeaching Award in Undergraduate Medical Education given by the Association of Pathology Chairs.

Dr. Stacy S. Drury, an assistant professor in the Department of Psychiatry, Section of Child and Adolescent Psychiatry, has been named to a threeyear appointment as the John F. McDermott Assistant Editor-in-Residence for the *Journal of the American Academy of Child and Adolescent Psychiatry*.

Dr. Timothy S. Harlan, associate chief of outpatient programs and assistant professor of clinical medicine, has launched the free Dr. Gourmet Mobile App so iPhone and iPad users can track caloric intake and physical activity from any location at any time.

Dr. S. Michal Jazwinski, John W. Deming, MD Regents Chair in Aging, professor of medicine and biochemistry, and director of the Tulane Center for Aging, has been elected to the rank of Fellow by the American Association for the Advancement of Science.



Dr. Richard Streiffer, right, professor in the Department of Family and Community Medicine and director of the Tulane Rural Immersion Program, received the 2011 Teaching Scholar Award for excellence in teaching, unique curriculum development and research on educational improvements. Dr. Benjamin P. Sachs, dean of the School of Medicine, presents the award.

Dr. Emad Kandil, assistant professor in the Department of Surgery and section chief of endocrine surgery in the Section of Endocrine and Oncological Surgery, has been named the Edward G. Schlieder Educational Foundation Chair in Surgical Oncology.

Dr. David Mushatt, associate professor of clinical medicine and chief of the Adult Infectious Diseases Section, was appointed to the Louisiana Governor's HIV, AIDS and Hepatitis C Commission. He is also the principal investigator for the Tulane HIV clinical research site — the Louisiana Community AIDS Research Program (LaCARP), a part of the international collaborative research group INSIGHT funded by the NIH.

Children's Hospital Los Angeles, Triche also manages a large cancer genomics, biology, and nanotechnology laboratory research program.

Dr. John Taylor Howe has recently retired from medicine after 23 years with LSU Medical School. He plans to travel, play golf and become a Tai Chi Master.

Dr. S. Andrew Schwartz, a full-time faculty member at UCLA, as been named to assistant professorships in orthopaedic surgery and pathology and laboratory medicine at UCLA Medical School.

Dr. Ronald H. Wender, academic chair of a new anesthesiology residency program at Cedars-Sinai Medical Center in Los Angeles, has returned to the Medical Board of California as consultant to the executive director. Wender also is a board member of the Doctors Company, a leading national provider of physician and surgeon medical liability insurance.

Dr. Richard E. Wood Jr. has been appointed to the faculty of the Department of Community Medicine at Mercer University School of Medicine in Savannah, Ga.

Dr. Joseph P. Marnell Jr. is the medical director of the Department of Psychiatry at Mercy Hospital in Minneapolis. **Dr. James S. Cox,** an emergency medicine physician in Fort Worth, is the 2010-2011 president of the Tarrant County Medical Society. He has also been appointed to the Texas Medical Association Committee on Emergency Medical Services and Trauma.

Dr. Robert A. Rice was honored with the 2010 Outstanding Humanitarian Service Award by the American Academy of Ophthalmology. He practices in San Antonio and Kerrville, Texas.

Dr. George W. Sledge **Jr.**, an internationally recognized pioneer in the development of novel therapies for breast cancer, received the 2010 William L. McGuire Memorial Lecture Award at the 33rd Annual CTRC-AACR San Antonio Breast Cancer Symposium. Sledge is the Ballve-Lantero Professor of Oncology and professor of medicine and pathology at the Indiana University School of Medicine, and a physician/researcher at the Indiana University Melvin and Bren Simon Cancer Center. He is also co-director of the IU Simon Cancer Center's breast program. Sledge's research focuses on molecular and tumor biology, growth factors and anti-angiogenic therapy. He has chaired several nationwide clinical trials involving new therapies for breast cancer.

Dr. Edward M. Hallowell, a psychiatrist in Sudbury, Mass., and New York, is author of *Shine: Using Brain Science to Bring the Best Out of Your People*, published in January by Harvard Business Press. It is Hallowell's 18th book and his first for a business audience. He was a member of the Harvard Medical School faculty from 1983 until he retired from academics in 2004 to devote his attention to his clinical practice, lectures and the writing of books.

Dr. Gordon L. Love taught a miniseminar called "Histologic and Cytologic Diagnosis of Fungal Disease" at the American Society of Clinical Pathology annual convention in San Francisco on October 28, 2010. A pathologist and mycologist who assists the College of American Pathologists in proficiency testing for fungi, he recently was appointed to the American Board of Pathology microbiology test committee. He is a clinical professor of pathology at University of California, Davis, School of Medicine; the director of the Quest Diagnostics laboratory; and a member of Diagnostic Pathology Medical Group, all in Sacramento.

Dr. Bruce R. Wall, a nephrologist, has been named to *D Magazine*'s list of the Best Doctors in Dallas for 2010.

Dr. Alexandria G. Polles, a psychiatrist, has joined the medical staff at Wesley Medical Center in Hattiesburg, Miss. She is certified by the American Society of Addiction Medicine, a fellow of the American Psychiatry Association and a certified sexual addiction therapist. Polles is also certified in eye movement desensitization and reprocessing therapy.

Dr. Stanley Ziomek practices cardiovascular and thoracic surgery at the Cardiovascular Institute of Southern

Missouri in Poplar Bluff.

Dr. Clyde W. Yancy Jr. has been named the Magerstadt Professor and chief of the division of cardiology at Northwestern Memorial Hospital and Northwestern University Feinberg School of Medicine. Yancy was most recently based in Dallas

WHEN IS PLASTIC SURGERY RIGHT FOR A TEEN?

Dr. Frederick N. Lukash (M '69, A&S '65), who practices in New York, takes on this topic in a new guide for parents published by BenBella Books. Every year, hundreds of thousands of teens undergo aesthetic plastic surgery. Lukash notes that, done properly, plastic surgery can improve self-esteem and quality of life. But as a serious undertaking, it must be considered carefully.

"This guide is not about giving into media pressures to be 'beautiful' but is about how structural surgery to look 'normal' can help teens better navigate the alreadystressful landscape of their better years," Lukash writes. "I have tried to maintain a very balanced approach to evaluating adolescents when structural issues such as prominent ears, facial imbalances (big nose/small chin) and breast issues have created emotional distress."

His work has attracted widespread media attention. At NewYorker.com, Macy Halford writes, "Lukash's book is all about drawing lines around what is a real need and what isn't, what is a safe procedure and what isn't, who is a good doctor and who isn't. My final verdict on it is that it's a necessary book, and one I wish had been available to the parents of teens who underwent cosmetic procedures – 200,000 of them – in the U.S. last year." Lukash has also done interviews with news outlets all over the nation, including "The Today Show" and "Good Morning America."

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The Safe and Sane Guide to Teenage Plastic Surgery is a finalist in the Health Category for ForeWord Magazine, a prime resource for libraries.

Lukash has been consistently voted one of "America's Top Doctors" by the Castle Connolly guide and the Consumers' Research Council of America. A boardcertified cosmetic and reconstructive plastic surgeon, he is also an assistant clinical professor of surgery at Albert Einstein College of Medicine.

as the medical director for Baylor Heart and Vascular Institute and the chief of cardiothoracic transplantation for Baylor University Medical Center. He is the immediate past president of the American Heart Association.

Dr. Joseph E. Bavaria (E '79), the Roberts-Measey Professor of Cardiovascular Surgery and vice chair at the University of Pennsylvania School of Medicine, recently co-authored a paper on transcatheter aortic valves, published in the *New England Journal of Medicine*.

Dr. Steven C. Littlewood enjoys being an ENT in Sacramento. His oldest son, Ryan, is in the PhD program at the University of Minnesota, and daughter Alden just got her first medical school acceptance.

Dr. Michael J. Baron was appointed to the Tennessee Board of Medical Examiners by Governor Bill Haslam in May 2010 for a five-year term. He is in private practice in Nashville, seeing patients with addictions, pain and psychiatric illnesses.

Dr. Cesar M. Roca and Dr. Theresa P. Roca (M '89) reside in Daphne, Ala., with their four daughters. Cesar practices sports orthopaedics in Mobile and Theresa splits her time between Pensacola, Fla., and Mobile as a pediatric cardiologist with the Nemouro Clinic and Diagnostic and Medical Clinic.

Dr. William A. Kutchera has been elected president of the Alaska Heart Institute, a 23-physician cardiology practice in Anchorage and Palmer.

Dr. Marilyn E. Pelias (N '84) married Jeffrey Pipes Guice on May 1, 2010, in New Orleans. They have opened a private practice, the Dr. Pelias Cosmetic Surgery and Lifestyle Center, in New Orleans; Guice is managing director.

THE GOOD DOCTOR FROM KEALAKEKUA TO KANSAS



Dr. Hiroshi Yasuda (M '35) began earning his way through life at an early age. Growing up in Hawaii in the early 1900s, he put himself through high school and college, and then worked at the local YMCA to save for medical school. From a pool of 6,000 applicants, Yasuda was one of only 130 admitted to Tulane University School of Medicine his incoming year.

"I remember him saying he benefited as a diagnostician by not understanding Cajun," says his stepdaughter Suzanne

Mitchell. "When he'd see patients at Charity Hospital, he had to figure out what was wrong without much to go on beyond the physical signs and his instincts."

Yasuda graduated in 1935 near the top of his class. His internship took him to Kansas, where a year later he began private practice in the rural town of Hardtner. A close friend recalled, "By horseback, tractor or whatever means were available, the good doctor from Hawaii went about caring for anyone who needed his skill and knowledge."

In 1943, Yasuda married Corinne Mitchell and began to help raise her two daughters. "The memories of my stepfather are very dear," says Suzanne. "I can see him now practicing at night to become ambidextrous so he could assist and operate on either side of the operating table."

Honoring a Simple Life

Yasuda died in 1965 at the age of 57. At the end of his wife's life in 2006, The Corinne M. Hayes Trust established the Hiroshi Yasuda M.D. Memorial Endowed Fund to support scholarships for deserving students at the Tulane School of Medicine. Suzanne, who was instrumental in setting up both her mother's trust and the endowment, has continued to add to the fund with gifts of her own.

Yasuda "always said an education was something no one could take away from you," said Suzanne. The recipients of the Yasuda scholarships agree and have each shared their stories in letters to her and her family.

"I tell you, when I get those letters, tears come to my eyes," she said. "I am so proud that my stepfather's memory is continuing, and that such fine future doctors are benefiting from such a simple life."

Supporting the Next Generation

To support endowed scholarships at the School of Medicine, you can contribute to a previously endowed fund or establish your own, add to it over the years and even include it in your estate plan. Scholarships help Tulane attract and retain the best and brightest students, and they lessen the burden of debt on our graduates. To discuss the possibilities, please contact David Kinahan, vice president for development at the School of Medicine, at kinahan@tulane.edu or 504-314-7635. **Dr. Tyler S. Lucas** is chief of orthopaedics at New York City's Metropolitan Hospital and medical director of City Orthopedics.

Dr. Karen B. DeSalvo (PHTM '92), a driving force in helping Tulane University create a thriving network of nationally recognized community health centers, has been tapped by New Orleans Mayor Mitch Landrieu to change the way the city approaches community health care and public health. DeSalvo, vice dean for community affairs and health policy at Tulane University School of Medicine, is taking a one-year leave to serve as the city's first health commissioner and senior adviser to the mayor for health policy. She also is overseeing public health initiatives and coordinating a citywide healthcare master plan.

Dr. Elvira Milano-Omid is new chief of staff of Lodi Memorial Hospital in California. She will hold the post for a two-year term. A pathologist, Milano recently oversaw the development of a new, state-of-the-art morgue project.

Dr. Margaret E. Parsons-Sander, past president of the Sierra Sacramento Valley Medical Society, now serves on the National Board of The American Academy of Dermatology. She practices in Sacramento.

Dr. Ricardo J. Rodriguez was installed as president of the Louisiana Orthopaedic Association at the annual meeting on March 19, 2011 in New Orleans. He is a partner in the Baton Rouge Orthopaedic Clinic.

Dr. Neil A. Russakoff, a pediatrician in Tucson, Ariz., started his own practice, Clara Vista Pediatrics, with two colleagues three years ago. He has two sons, one in middle school and one in high school. He enjoys a fierce online Scrabble rivalry with classmate Dr. Marshall Silverman; occasionally classmate Dr. Karen DeSalvo joins in. Dr. Hector M. Cabrera opened the new Algiers Urgent Care Clinic in June 2010 in New Orleans.

Dr. Matt M. Longjohn (PHTM '99) is the senior director of chronic disease prevention for the YMCA of the USA, based in Chicago. In this newly created role, Longjohn will lead development and dissemination of innovative programs and initiatives in the area of chronic disease prevention, including diabetes, cancer survivorship and childhood obesity.

Dr. Sean M. McWilliams was appointed chief of surgery at Sacred Heart Hospital on the Emerald Coast in Destin, Fla.

Dr. Sarah Youssefi Estrada is a dermatopathologist with Affiliated Dermatology in Scottsdale, Ariz. She has two children, Carlos David, 4, and Lucy, 4 months.

In Memoriam

- '38 Dr. Raymond F. Mayer
- '41 Dr. John F. McKenney Jr. Dr. Milton Turner
- '42 Dr. Joseph T. Ainsworth Dr. Warren M. Jacobs Dr. Harvey C. May
- '43 Dr. Edward L. Burke Dr. Carey C. Womble Jr.
- '44 Dr. Bernard M. Altschuler Dr. Harold V. Cummins Dr. Fernand J. Dastugue Jr. Dr. Robert S. Ellis
- '45 Dr. William H. Blahd Sr. Dr. Armand G. McHenry Jr. Dr. George E. Welch
- '46 Dr. Samuel Logan Dr. Nelson Manowitz
- '47 Dr. James M. Brock
- '48 Dr. James W. Vildibill Jr.
- '49 Dr. James H. Gentry Sr. Dr. Francis M. Harris Jr. Dr. Arthur F. Hoge Jr. Dr. Thomas Naum James
- '50 Dr. James H. Kimbell
- ⁵¹ Dr. John N. Harrington Sr. Dr. Peter J. Spoto
- ⁵² Dr. Richard J. Barry Dr. Frederick R. Braden

Dr. Marvin E. Chernosky Dr. Delio D. Delgado Dr. Phanor L. Perot Jr. Dr. Lamar M. C. Smith Jr.

- '53 Dr. John R. Castle Dr. William deG. Hayden Dr. George B. Paxton Jr.
- '54 Dr. Maynard H. Alstet
- '55 Dr. Henry K. Freedman Dr. Lowry L. Sheely
- '56 Dr. Frank T. McPherson
- '57 Dr. William A. Bootle Jr. Dr. Glenn L. Gore
- '58 Dr. Willis M. Russell Dr. Alfred D. Tisdale Jr. Dr. Anthony Ziegler Jr.
- '59 Dr. Richard M. McGrew Jr.
- '60 Dr. Wafford H. Merrell Jr.
- '61 Dr. David R. Davis II Dr. J. Kavanaugh Jackson
- ^{'64} Dr. David W. Davis Jr. Dr. Arthur E. Diamond
- '70 Dr. Edward M. Elmer
- '73 Dr. Jeffrey A. Marmelzat
- 75 Dr. Allen C. Dukes
- '84 Dr. Gary S. Benton
- '92 Dr. William M. Gottliebson





ALUM'S PHOTOS WIN KUDOS

National Geographic has taken notice: a photo of Yellowstone bison and hot springs by Dr. Howard M. Sheridan (M '69) topped 24,000 other entries as the Englishlanguage winner in the magazine's 2007 International Photography Contest. A retired radiologist and businessman in Fort Meyers, Fla., Sheridan began taking photos of animals about 10 years ago. Featured here are his striking images of a mountain goat on a glacier and colorful spoonbills. For more on Sheridan and his work, visit tmaa.tulane.edu.



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