THE MAGAZINE OF TULANE UNIVERSITY SCHOOL OF MEDICINE | SUMMER 2016

TULANE | MEDICINE

LOVE AS MEDICINE

A Deep Devotion to Society's Most Vulnerable Children

SEEING MELATONIN IN A NEW LIGHT

PREVENTING CANCER IN ACADIANA

As the training ground for future physicians, American medical schools are responsible for educating students to serve an increasingly diverse society. The Pew Research Center has determined that by 2060, 57 percent of the population will be non-white. The U.S. population is growing more and more diverse and that growth is, and should be, influencing how we look at medical school education.

In this issue of *Tulane Medicine*, you will meet Bennetta C. Horne, the new director of our Office of Multicultural Affairs. Research proves that medical students who attend racially and ethnically diverse medical schools are better equipped to care for patients in a diverse society. You will learn more about how Bennetta is creating wonderful opportunities for our future physicians.

One of the things that makes Tulane Medical School unique is that we serve an incredibly diverse population in New Orleans and south Louisiana. This diversity gives our researchers and students access to people and populations they can't encounter anywhere else. One great example of that is the work of Dr. Jordan Karlitz, who has found an interesting connection between colorectal cancer and Louisiana's Cajun population. Starting on page 20, you can read more about how following a hunch led to a breakthrough.

You will also read about a gift that will bring much-needed care to the diverse New Orleans community. Thanks to the Brinton family, we will now be able to expand the work of our community health workers at the Brinton Family Health and Healing Center and expand training opportunities for our future physicians. The Brinton family's commitment to holistic and preventative health care is a true gift for the underserved patients of New Orleans.

Working in New Orleans has made our faculty experts in treating a diverse community, and that expertise has helped them secure several grants that will aid our youngest and most vulnerable patients. Our child and adolescent psychiatry programs will now be able to fund several community-based and training initiatives that will bring important mental health services into New Orleans neighborhoods. You can read more about their work in this issue.

I have always believed in the importance of diversity and the many benefits of surrounding yourself with a wide variety of perspectives. Tulane's commitment to diversity is empowering our students to become better citizens and better physicians.

L. Lee Hamm, MD
Senior Vice President of Tulane University
Dean of the School of Medicine

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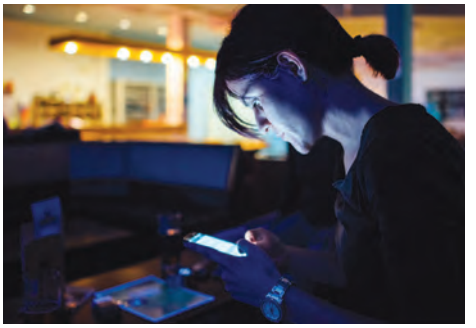
FEATURES



DEPARTMENTS

MUSIC MENDS

On a Tuesday afternoon, an acoustic version of the Beatles' "Eleanor Rigby" musically masks the hum of the machines in the Tulane Comprehensive Cancer Clinic infusion room. School of Medicine gynecologic oncologist Dr. William "Rusty" Robinson strums a guitar while second-year medical student Shuo Huang expertly plays her violin. The two are volunteers with the Music Mends program, an idea started a few years ago and one Huang revived after her mother went through treatment here.

"Going with my mom to chemotherapy sessions and seeing her having to sit here for hours on end and not having anything really to do, to have at least a distraction for patients here, it's worked out very well so far," Huang says.

The program is open to students, faculty and staff in the School of Medicine along with hospital employees. The volunteers spend a couple hours per week playing for patients.

"The patients greatly appreciate seeing another side of their providers," says Robinson, a longtime musician outside of his medical career. "They really get into it when they can perceive their provider as something more than just the administrator of bad news."

Robinson says the music also benefits the performers. It helps them connect with patients on a more personal level. It also brings back a skill Huang and many of her fellow students thought they would no longer use in medical school.

Tulane University School of Medicine students, Shuo Huang (left) and Gabriela Aviles (right) volunteer with the Music Mends program.

"I've been playing violin ever since I was six but had to stop for a while because of studying," she says. "This is just a great release from having to stare at textbooks all the time."

Music Mends works in conjunction with the Arts in Medicine program at the cancer clinic, which also includes group art activities and chair-side crafts in the infusion room. Cancer patients who participate in arts therapy programs report feeling less depression, anxiety and pain than those who don't. Huang is now expanding Music Mends to the uptown campus in the hopes of recruiting more volunteers.

TULANE RESEARCHERS TESTING NEW MS TREATMENT

Dr. Tamas Kozicz, Tulane associate professor of anatomy

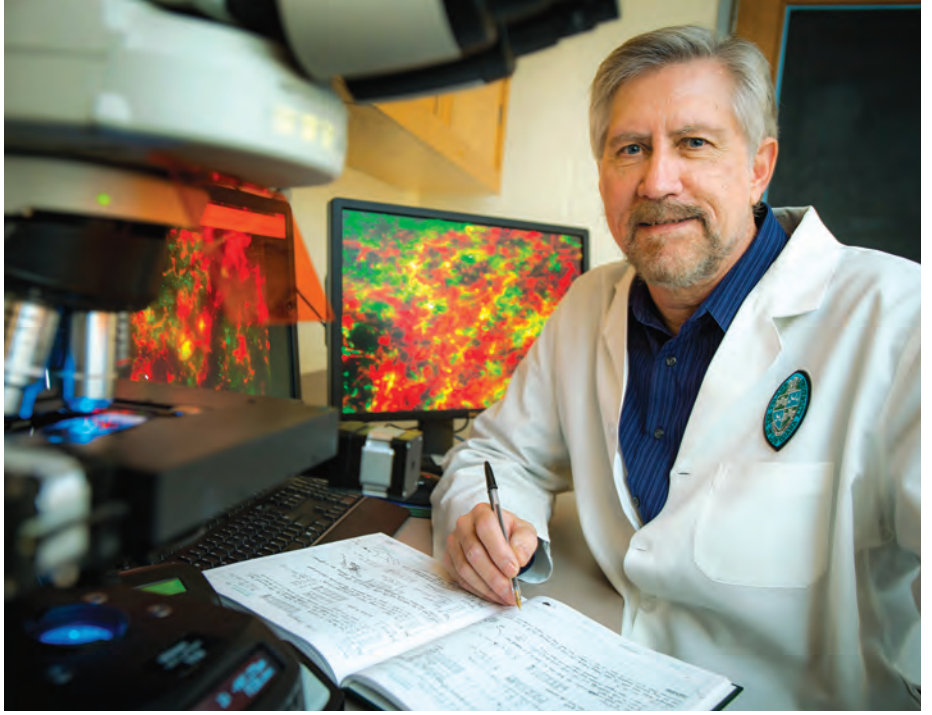
Researchers in the Tulane University School of Medicine are testing a therapy that could reveal the pathobiology behind some forms of multiple sclerosis. The makers of Teriflunomide, an oral immunomodulatory disease-modifying therapy that has been approved for the treatment of MS in many countries, awarded Tulane Associate Professor of Anatomy Dr. Tamas Kozicz and his team $120,000 for the project.

Kozicz and his team in the Hayward Genetics Center hypothesize mitochondrial dysfunction plays an important role in the pathobiology of MS. Multiple sclerosis is a disease in which the immune system attacks the central nervous system. More than 100 years after it was first named and described by a neurologist, the cause of MS remains unknown.

Kozicz is looking into the impact of the drug Teriflunomide on mitochondrial function and how that function may interfere with immune response. Kozicz says his research may show people who have a problem with mitochondrial function, so their cells don't produce enough energy, may be more vulnerable to the impacts of MS.

Not all people with MS have mitochondrial dysfunction, says Kozicz, but the research may reveal that in a subgroup of MS patients, mitochondrial dysfunction is indeed the underlying pathobiology.

"What we now do if you have MS, you just use certain drugs and start treating people with the drugs," says Kozicz. "The response is often not optimal, because we really don't look into the individual differences with respect to the underlying pathobiology that would have a profound effect on the choice of drug and therapy response." Kozicz says the research could lead to more personalized treatment of multiple sclerosis in the future.



Lead investigator Dr. James Zadina, VA senior research career scientist and professor of medicine, pharmacology and neuroscience at Tulane University School of Medicine.

NEW DRUG COULD BE SAFER, NON-ADDICTIVE ALTERNATIVE TO MORPHINE

Researchers at Tulane University School of Medicine and Southeast Louisiana Veterans Health Care System have developed a painkiller that is as strong as morphine but isn't likely to be addictive and has fewer side effects, according to a new study in the journal *Neuropharmacology*.

Using rats, scientists compared several engineered variants of the neurochemical endomorphin, which is found naturally in the body, to morphine to measure their effectiveness and side effects. The peptide-based drugs target the same pain-relieving opioid receptor as morphine.

Opium-based drugs are the leading treatments for severe and chronic pain, but they can be highly addictive. Their abuse results in thousands of overdose deaths in the United States annually. They can cause motor impairment and potentially fatal respiratory depression. Patients also build up tolerance over time, increasing the risk for abuse and overdose.

"These side effects were absent or reduced with the new drug," says lead investigator Dr. James Zadina, VA senior research career scientist and professor of medicine, pharmacology and neuroscience at Tulane University School of Medicine. "It's unprecedented for a peptide to deliver such powerful pain relief with so few side effects."

In the study, the new endomorphin drug produced longer pain relief without substantially slowing breathing in rats; a similarly potent dosage of morphine produced significant respiratory depression. Impairment of motor coordination, which can be of particular importance to older adults, was significant after morphine but not with the endomorphin drug.

The new drug produced far less tolerance than morphine and did not produce spinal glial cell activation, an inflammatory effect of morphine known to contribute to tolerance.

Scientists conducted several experiments to test whether the drug would be addictive. One showed that although rats would spend more time in a compartment where they had received morphine, the new drug did not produce this behavior. Another test showed that when the press of a bar generated an infusion of medicine, the rats increased efforts to obtain morphine but not the new drug. The tests are predictive of human drug abuse, Zadina says.

Researchers hope to begin human clinical trials of the new drug within the next two years.

"It's unprecedented for a peptide to deliver such powerful pain relief with so few side effects."

—DR. JAMES ZADINA

Tulane's 2016 Match Day celebration. Left: Dr. Deja Rose (center) with her mother Sylvia Rose and her fiance Brandon Darrington. Right: Drs. Alex Bernadett and Evan Conner celebrate their matches.

WHAT A MATCH!

Faculty members, friends and family packed the Celestin Ballroom at the Hyatt Regency New Orleans to cheer on members of the Tulane University School of Medicine Class of 2016 as they learned where they'll spend the next chapter of their careers.

This year's Match Day was one of the largest with 203 graduating seniors placed in residencies across the country, including 21 in Louisiana, says Dr. Marc Kahn, Peterman-Prosser Professor of Medicine and senior associate dean of student affairs.

More than 26,300 students participated in the program nationally. "That's an all-time record," Kahn says.

This year's class was bigger because it was the first to include students from two accelerated programs, the Health Education Adaptive Learning Experience, a 3.5-year program for PhD research scientists, and the Tulane Accelerated Physician Training Program (TAP-TP), which allows undergraduates to complete their medical and undergraduate degrees within seven years, including a year of public service. "It seems like it's been a full transformation for me," says TAP-TP student Brian Templet, who joined Tulane as a freshman in 2009. "It's been a long road. It's cool to see it all pay off."

2016 GRADUATES
203

LOUISIANA MATCHES
21

ACCELERATED PROGRAMS
2

PRIMARY CARE MATCHES
73

Templet was matched in a family medicine residency locally at East Jefferson General Hospital.

This year, 73 students—almost 36 percent of the class—matched in primary care. There was also an increased interest in emergency medicine, internal medicine and pediatrics, Kahn says.

Alex Bernadett was elated to get his No. 1 choice. He'll spend his family medicine residency in Seattle at Swedish Medical Center.

"There are no words to describe how I feel about our class and everyone in this room," he says. "We are all so lucky to be here."

HIGH HONOR FOR TULANE PROFESSOR

Dr. Raju Thomas, recipient of a Distinguished Service Award

The American Urological Association recently honored Dr. Raju Thomas with a Distinguished Service Award for 2016. Thomas is professor and chairman of urology at Tulane University School of Medicine. The AUA award recognized Thomas' leadership following Hurricane Katrina and his humanitarian service providing minimally invasive surgery to less privileged areas of the world.

Thomas came to Tulane as a urology resident in 1977 and worked his way up through the department, becoming chair in 1996. As with so many others, Hurricane Katrina changed his life and work.

"My main focus was to get over the fact that one day I was chair of a department of 51 employees through research, residency, fellowship, faculty and the next day there was nothing," Thomas says.

Evacuated to New York, Thomas spent the first weeks after the storm locating his eight residents and getting them placed in other urology residency programs around the country. He returned to New Orleans in October of 2005 and got to work re-establishing a urology program at Tulane Lakeside Hospital. The first resident returned in April of 2006 and all eight eventually graduated from Tulane.

"It took me about two years but we had our department back, our faculty back, our volumes back and it was just a once-in-a-lifetime experience," says Thomas.

More than 10 years after the storm, Thomas is still hard at work. The 65-year old estimates he travels more than 100,000 miles a year to speaking engagements, conferences and volunteer work. Thomas recently returned from India where he partnered with International Volunteers of Urology to perform surgery in a remote part of the country.

"Dr. Thomas has been extremely active in humanitarian urological efforts and has stimulated the next generation to share his passion for service," says Dr. Manoj Monga, secretary of the AUA and director of the Stevan Streem Center of Endourology & Stone Disease at the Cleveland Clinic. "His contributions to minimally invasive urology as a means to optimizing quality of care are recognized internationally. Most importantly his commitment to his residents, his program and his city as it responded to and rebuilt after Hurricane Katrina is a model for all."

Thomas's research continues in the use of surgical robotics to treat bladder and prostate cancers. He says he has no plans to slow down anytime soon. "I've been here for 39 years at Tulane, it's been fantastic and it gets better every day," Thomas says.

PREVENTING BOYS FROM BECOMING CALLOUS ADULTS

How do you stop a child, especially one who has experienced significant adversity, from growing up to be a psychopath? Responsive, empathetic caregiving—especially when children are in distress—helps prevent boys from becoming callous, unemotional adolescents, according to a new Tulane University study of children raised in foster care.

The research, which was published in the *Journal of the American Academy of Child and Adolescent Psychiatry*, is the first to show that an intervention can prevent the precursors to psychopathy.

Researchers measured levels of callous-unemotional behavior in 12-year-olds from the Bucharest Early Intervention Project, a cohort of children abandoned in Romanian orphanages in the early 2000s and followed longitudinally ever since. Half of these children were placed in high-quality foster care as toddlers, while others grew up in institutional care. Researchers compared their results with children who had never been orphans. The study is led by Dr. Charles H. Zeanah from Tulane, Dr. Nathan A. Fox from the University of Maryland, and Dr. Charles A. Nelson from Harvard Medical School.

> "If we can intervene early to help kids in their development, it not only helps them but also the broader society."
>
> —DR. KATHRYN HUMPHREYS

Overall, children reared in orphanages had significantly higher levels of callous-unemotional traits compared to children who had never been institutionalized. Boys placed in foster care had lower levels of callous-unemotional traits than those who did not receive the intervention. What explained the difference? Researchers observed children with their caregivers as toddlers and found that the more sensitive caregivers were to a young child's distress, the less callous and more empathic the boys were in adolescence.

Lead author Dr. Kathryn Humphreys, who conducted the study as a postdoctoral fellow in infant mental health at Tulane, says the findings can help child welfare advocates target and support specific caregiver behaviors when reaching out to families.

"If we can intervene early to help kids in their development, it not only helps them but also the broader society," she says. "The best way to do that is making sure children are placed in homes with responsive caregivers and helping caregivers learn to be more responsive to their child's needs."

FIRST RESPONDERS CLINIC RENAMED AFTER LEGENDARY DR. MCSWAIN

For years during Carnival, it was a rite of passage for police officers across the city heralding the official beginning of parade season—the annual B12 shot from Dr. Norman McSwain, surgeon for New Orleans Police Department and Tulane School of Medicine professor of surgery.

The vitamin shot was intended to keep officers healthy as they protected revelers, but it was also a sign that the internationally renowned trauma surgeon had their backs during their busiest, most-trying shifts of the year.

As officers headed into their first Mardi Gras in three decades without Dr. McSwain, who died last year, Tulane Health System, Tulane University School of Medicine and city officials recently dedicated the police and first responder's clinic he founded with a new name in his honor.

"No matter where in the city he was needed, he was there—always," says New Orleans Mayor Mitch Landrieu, adding that he hopes the new name inspires both doctors and first-responders to emulate McSwain's legendary dedication to the city and his profession.

The McSwain First Responder's Clinic, located at 275 LaSalle St. within the Tulane Multispecialty Clinic, offers walk-in appointments (with newly expanded hours) for law enforcement, fire and emergency responders three days a week. The clinic treats an average of 50 patients per month.

New Orleans Police Superintendent Michael Harrison echoed the mayor's sentiments, recalling McSwain's service to first responders as trauma director for Charity Hospital of New Orleans. When an officer was injured on the job, McSwain was one of the first to come to the rescue, he says.

"I can't begin to tell you how many surgeries Dr. McSwain performed on these officers, how many bones he reattached, how many officers he put back together ," he says. "For my 24 years, I can remember that no matter what happened, when we were on the way to the hospital, the only thing that brought us comfort was someone saying, 'Dr. McSwain has been notified, he will meet you there.'"

McSwain's daughter, Merry McSwain, says her father would be honored to know that his legacy will live on as students and doctors follow his footsteps in caring for others. Paraphrasing her dad's favorite saying, she hopes clinic staff will continue to do "'something for the good of mankind' today and for generations to come."

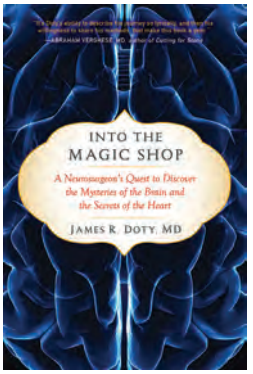
"When an officer was injured on the job, Dr. McSwain was one of the first to come to the rescue."

—NEW ORLEANS POLICE SUPERINTENDENT MICHAEL HARRISON

City and healthcare officials hold a ceremony to rename the first responders clinic The McSwain First Responders Clinic. Dr. McSwain's daughter, Merry McSwain, is pictured to the left of the sign.

Dr. James R. Doty, shares a moment with His Holiness the 14th Dalai Lama who is the founding benefactor of CCARE. Doty is the author of *Into the Magic Shop*. (Photo courtesy of Firdaus Dhabhar)

NEUROSURGEON SHARES SECRETS OF THE BRAIN AND THE HEART



A firm believer in the power of neuroplasticity, Tulane alumnus Dr. James Doty says "each of us has the capacity to change our lives by changing our brains. It is how we respond to our circumstances that create our lives, not the circumstances themselves."

When Dr. James R. Doty was a somewhat lost 12-year-old boy, a chance meeting with a woman changed the course of his life. *Into the Magic Shop* (Penguin, Feb. 2016) tells Doty's remarkable story of walking into a magic shop at age 12 and meeting Ruth, the owner's mother, who knew nothing about the magic in the store—but a different type of magic. Over the course of six weeks meeting with her every day, she taught him a technique of meditation, mindfulness, visualization and being attuned to "the compass of the heart." Over this period of time she literally rewired his brain and made him understand that one's circumstances only have power if one gives them power. It was his first experience with what is now known as neuroplasticity.

"Ruth made me understand that many people have a negative dialogue going on in their head that results in a negative physiologic response, but that the dialogue is not you. That response not only limits one in regard to living up to their potential but has a very negative impact on their health and even their longevity," Doty says. "She not only taught me how not to have a response to the negative dialogue, but techniques to change the dialogue to one of self-affirmation."

The core message of his book, Doty says, is that "each of us has this ability to change how we respond to life's circumstances and, by doing so, change how the world responds to us."

Doty is now a successful neurosurgeon and professor of neurosurgery at Stanford University. *Into the Magic Shop* recounts his personal story growing up in poverty with an alcoholic father and a mother who suffered a stroke and was chronically depressed.

As the founder and director of the Center for Compassion (CCARE) and Altruism and Education at Stanford, Doty researches the neural bases of compassion and altruism and how such behaviors have a profound effect on one's mental and physical health. He states that, "practicing such behaviors with intention has a more positive effect on health then being at one's ideal body weight and exercise. It has been demonstrated that with as little as two weeks of training, one can have not only a positive effect on others but a profound effect on their own health."

Doty is one of Tulane University School of Medicine's most generous donors, having not only donated millions of dollars but endowed the dean's chair, contributed to restoring the Hutchinson Library after Hurricane Katrina and also created a scholarship for socioeconomically disadvantaged students.

"It has been a privilege to have attended Tulane School of Medicine but just as importantly to give back to the institution that has allowed me to flourish as a physician and has given me the tools to be a better human being," Doty says.

ENGAGING INDUSTRY IN RESEARCH PARTNERSHIPS

James Zanewicz, Office of Research Business Development

Tulane University has established a new Office of Research Business Development to promote the university's diverse clinical and research capabilities to the private sector. Chief Business Officer James Zanewicz, a Tulane Law alumnus, is leading the effort. He launched a new online portal for potential partners to learn more about key research strengths within the School of Medicine and Tulane National Primate Research Center. He has more than 20 years of experience in the private and academic sectors, most recently as the head of technology transfer for the Howard Hughes Medical Institute's Janelia Research Campus in Ashburn, Virginia.

What is the mission of the Office of Research Business Development? We promote Tulane's value to the community by identifying, facilitating and nurturing opportunities for collaborations with industry and foundations. This will allow those external parties to access the unique scientific expertise and facilities available only at Tulane and move their products and services—or foundation research—forward.

How is your effort different from the Office of Technology Transfer, which is charged with bringing Tulane innovations to market? Where the Technology Transfer team focuses on bringing innovations developed at Tulane to market, my goal is making sure external partners are aware of our research strengths/capabilities and to facilitate their enhanced relationship with Tulane on all fronts.

What are the research strengths you're focusing on? As we begin, I have focused on our key strength—cardiovascular and related chronic disease conditions, oncology, infectious disease and neuroscience. We are also highlighting some truly unique Tulane strengths—our commercial-focused peptides lab, the center for circadian biology, human performance research, stem cell research and regenerative medicine and the Goldring Center for Culinary Medicine.

> "By listening to the true needs of our partners, and anticipating how we can help them achieve their goals, we will position Tulane, our faculty and our students as ideal collaborators and human capital for industry."
>
> —JAMES ZANEWICZ

How are Tulane's research capabilities unique? As far as I am aware, Tulane is the only institution in the country with a National Primate Center and Schools of Medicine, Business, Law, Public Health and Tropical Medicine and a singular college housing both Science and Engineering in the country. This positions us to be more full-service to external research partners based solely on our available capabilities without even factoring in the high caliber of our research, students and faculty.

As it gets more competitive for federal research dollars, is this a new funding model to support academic research? This is the future of external academic engagement activities, and Tulane is well ahead of the curve in establishing such a role. Nationwide, the trend is beginning to look beyond individual one-off deals and to consider the larger picture for both Tulane and our potential partners—and we are already a full year down that path. By listening to the true needs of our partners, and anticipating how we can help them achieve their goals, we will position Tulane, our faculty and our students as ideal collaborators and human capital for industry—and by doing so we will see their level of engagement in our research enterprise increase by leaps and bounds.

For more information about the Office of Research Business Development, visit engage.tulane.edu or contact James Zanewicz at zanewicz@tulane.edu or (504) 988-4286.

RECRUITING THE BEST AND BRIGHTEST FROM ALL BACKGROUNDS

Bennetta Horne recently took on a new title at Tulane University: Manager of the Tulane School of Medicine Office of Multicultural Affairs. An employee of the university since 2003, Horne says she's looking forward to the challenges of her new role.

New Multicultural Affairs Office

The office opened in October of last year with the goal of increasing diversity and inclusion in the School of Medicine. The office's initiatives will engage and benefit all School of Medicine students, but target populations traditionally underrepresented, including those who identify through race, religious beliefs and sexual identity. Horne will work to recruit the best and the brightest from all backgrounds.

"What I like about my position is the opportunity to expose even more students and eventually faculty and staff to the dynamic opportunities available through a medical education here at Tulane," says Horne. "From my viewpoint, Tulane is poised and ready to enroll, educate and showcase a diverse student body that more closely resembles the patient population it serves as well as the New Orleans community as a whole."

Recruiting Underrepresented Populations

Horne has already begun actively recruiting underrepresented populations both locally and regionally. She is also developing diversity and inclusion training which may be implemented in the current School of Medicine curriculum with the goal of increasing cultural sensitivity among the student body, faculty and staff.

Horne also hopes to set up pipeline programs to expose local youth to the study of medicine while creating more outreach opportunities for medical students. Additionally, she is reaching out to alumni to set up a mentoring network.

"The Office of Multicultural Affairs is needed to expand the reach of the outstanding opportunities for medical education that currently exist at Tulane to build a more diverse and inclusive student population," says Horne.

Before assuming her current role, Horne held positions in program and grant management in the Tulane University Center for Bioenvironmental Research and the Department of Chemical and Biomolecular Engineering.

"What I like about my position is the opportunity to expose even more students and eventually faculty and staff to the dynamic opportunities available through a medical education here at Tulane."

—BENNETTA HORNE, MANAGER OF THE TULANE SCHOOL OF MEDICINE OFFICE OF MULTICULTURAL AFFAIRS

Love as Medicine

A Deep Devotion to Society's Most Vulnerable Children

Tulane's Institute of Infant and Early Childhood Mental Health may not be a household name, but to child welfare advocates it's a research, training and policy powerhouse–a lifeline for hundreds of young children and their families.

BY **KEITH BRANNON**
PHOTOGRAPHS BY **QUEENIE LIAO**

Teri Hrabovsky is a passionate advocate for foster children. She and her husband have opened their home to more than 50 children in the past nine years—and adopted two—while raising three biological daughters.

"We've had children stay as short as a day and as long as 11 months," says Hrabovsky, a board member of the Louisiana Foster and Adoptive Parent Association. "It's an amazing opportunity to make a difference in a child's life."

But 54-year-old Hrabovsky almost gave up within her first year as a foster parent. She might have walked away had it not been for a support program run by faculty from child and adolescent psychiatry at Tulane University School of Medicine.

She was caring for two little girls, aged 2 and 3, who were placed in her home by child protective services. The sisters, whose mother was battling drug addiction, were extremely aggressive and insistent, especially at dinnertime.

"'I need to eat right now! I want it now! I'm hungry—I want it now!'" she remembers them screaming whenever she went to the kitchen to make a meal. "With my other children I could always say, 'Go play with your toys while mommy makes dinner.' But these girls were so assertive."

The toddlers were also mysteriously hiding food all over her house. Exasperated, Hrabovsky called a Tulane child psychologist and social worker who were part of an assistance program for families involved with the Department of Children and Family Services. The Tulane clinicians visited her home, evaluated the children and gave her advice to help curb the behavior and understand why it was happening.

"They were so kind and insightful. We had never worked with kids from hard circumstances before," Hrabovsky says. "My husband and I would not have been foster parents had it not been for Tulane's infant team. We would have quit. Their involvement early on has really propelled us to do what we do now."

PHOTOGRAPH BY CRAIG MULCAHY

The Hrabovsky family

The Tulane staff members explained that the little girls were so neglected that the only way they learned how to be heard was to be forceful and insistent. They hid food because they were afraid it would be scarce. Hrabovsky had the sisters help her prepare meals so they could understand that waiting for dinner didn't mean they weren't going to eat. It took three months of counseling for the behavior to change. "They had to be retaught—you don't have to take care of yourselves," she says. "We are going to take care of you. You can be a child again."

UNITY & FOCUS

Helping parents like Hrabovsky is just one of the ways Tulane's Institute of Infant and Early Childhood Mental Health works to make life safer and more nurturing for children. Founded in 2001 to consolidate resources for young children's mental health within the School of Medicine, the institute has become a leader in training, research, outreach and advocacy for infant mental health.

> "They had to be retaught—you don't have to take care of yourselves. We are going to take care of you. You can be a child again."
> —TERI HRABOVSKY

The institute uniquely focuses on children from infancy to age 6—a period that sets the course for cognitive and emotional development well into adulthood. By focusing on these crucial early years, faculty believe they can have a profound impact in helping kids grow into healthy adults, says Institute Director Dr. Charles Zeanah, Sellars-Polchow Professor of Psychiatry.

The institute works to influence every major institution or profession that may impact a child's early life,

including childcare centers, pediatricians, child welfare agencies and elected officials. More than 15 faculty members run a wide spectrum of outreach programs that target everything from helping parents struggling with fussy babies to intervening on behalf of the state in cases of severe abuse.

Faculty are also engaged in research, developing the first model for diagnosing and treating post-traumatic stress disorder in young children, discovering the biological mechanisms for how early trauma affects infants' DNA and co-leading the Bucharest Early Intervention Project, a ground-breaking international study of the effects of institutionalization on brain development and behavior. The Irving Harris Foundation has supported the institute since its inception.

Faculty share their innovations and the latest techniques with colleagues and child welfare advocates across the state. Over the last 15 years, the institute has trained more than 1,000 mental health professionals as well as court-appointed special advocates from state departments and community agencies.

"We have been leaders in training and educating professionals from a variety of backgrounds about early childhood mental health," Zeanah says. "We train in Louisiana, nationally and internationally."

It's a far cry from the institute's early days when many state officials and child welfare advocates didn't fully understand infant mental health.

"When most people think about young children they think about them in an idealized way," Zeanah says. "It is really uncomfortable for people to think that very young children can experience significant adversity and be affected by it. There are opportunities to help children overcome that, but if you don't recognize it as a problem—and take young children seriously—then it's hard to get them the help that they need."

STRENGTHENING THE TIES THAT BIND

How do mental health professionals reach such young minds? Mostly by focusing on the adults who care for them. Making sure a child is supported and nurtured by a loving and consistent caregiver is the single best predictor of outcomes.

"Young children's mental health is really about the quality of their relationships," Zeanah says. "It's not a kid on the couch or giving a kid Prozac or something like that. It's really about trying to change the nature of their relationships."

Studies have shown that intensive services for young children and their parents are effective in aiding development, decreasing troubles in early childhood and preventing problems later. The Institute teaches parents how to manage disruptive behaviors, create structure, establish positive rewards and better understand development milestones.

Dr. Mary Margaret Gleason is the director of Tulane Infant Mental Health Services, a clinic partnership with Metropolitan Service District for children under the age of 6 with intensive mental health needs. It is one of the few mental health clinics for very young children in New Orleans.

Typical patients have exhibited extreme emotions or behaviors so problematic that their families need help. About a third have been kicked out of childcare. "It's usually an accumulation of behavior that brings them in rather than a single event," Gleason explains. "A 5-year-old who has chased people with a knife. Children who can't be taken to family gatherings because they run away or they hit people or tip over the food table or that sort of thing."

A team, including psychology faculty, psychology interns, child psychiatry and triple board residents assess the child to understand the cause of the behavior. Many times the children are coping with trauma. They may have lost a family member or live in a home under stress due to depression, poverty or food insecurity.

"We provide state-of-the-art assessments to understand what's going on and then provide treatment plans that focus on the child in the context of the family they are living in and the relationships they have," she says.

"Kids know what they're feeling. Kids as young as three-and-half can tell you about what makes them happy, sad, mad or scared,"

Major initiatives include:

THE TULANE PARENTING EDUCATION PROGRAM
Helps the Louisiana Department of Children and Family Services and those involved in abuse or neglect cases.

TULANE EARLY CHILDHOOD MENTAL HEALTH CONSULTATION
Assists those with mental health problems in more than 170 childcare centers. The institute also helped establish and implement the state's first quality rating system for childcare centers.

TULANE EARLY CHILDHOOD COLLABORATIVE PROGRAM
Teaches pediatricians to recognize and address early mental health problems and to provide parenting resources to caregivers.

MATERNAL INFANT EARLY CHILDHOOD HOME VISITING
Provides mental health consultation to public health nurses involved in the Nurse Family Partnership, a statewide program for low-income, first-time mothers.

METROPOLITAN TULANE INFANT MENTAL HEALTH SERVICES
One of the New Orleans area's only mental health clinics for very young children.

CHILDHOOD POLICY LEADERSHIP INSTITUTE
A five-month advocacy program that educates elected officials and policymakers about the importance of early childhood well-being.

FUSSY BABY NETWORK NEW ORLEANS & GULF COAST
A call-in and home-visit service for parents struggling with infants.

Gleason says. "So what we often do is draw a happy face, a sad face, a mad face and a scared face, and we talk about what those feelings are and what makes them have those feelings—and then what they do when they have those feelings."

When children feel comfortable, they can tell the stories of their lives. They talk about what makes them scared–like hearing adults argue–and how they react. One child said his heart thumps and his stomach gurgles when he's afraid. Gleason taught him to recognize these emotions and physical cues so he could regulate his behavior. Of course, a 4-year-old's coping mechanism can be creative.

"One kid wants to be a fireman, so Dr. Angie Breidenstine, his psychologist, taught him to do a fireman's breath when he is stressed," Gleason says. "He takes a big breath and blows like a fireman's hose."

FIGHTING TO SAVE THE ABUSED & NEGLECTED

One of the institute's largest initiatives is the Tulane Parenting Education Program (T-PEP), an intervention for abused or neglected children whose families are involved with the Louisiana Department of Children and Family Services. Initially for only Jefferson Parish cases, the program more than doubled three years ago when the state expanded it into Orleans, St. Bernard and Plaquemines parishes. It now treats adolescents up to 18 years old, but more than 80 percent of its patients are under the age of 5. The program served 551 children and 446 adults last year, says Letia Bailey, T-PEP co-director and assistant professor of clinical psychiatry.

"Some of the families we work with have children who have been removed from their homes and some families have children at home but have been put on notice that if they don't rectify neglectful or punitive parenting practices, they are at risk for having their children removed," she says.

The program often handles abuse cases. Typically, these are parents who've lost control and taken corporal punishment too far, leaving marks on the child.

"They may be remorseful, but they really don't know how to parent any other way without using corporal punishment," Bailey says. "What we find is that the parents we work with a lot have had difficult upbringings themselves and maybe poor parenting models. Very often they will say things to us like: 'Well, how do you parent if you don't hit your kids?' They really don't know that there are other strategies."

T-PEP staff members meet with families to assess parenting strengths, deficits and parent-child relationships, and then develop an intervention plan. Interventions often emphasize actively listening to children and praising them. The plans also include helping parents establish a system of rewards and consequences for their children.

They also assess children for trauma and work with them while they are in foster care, which is typically a year to 18 months. The program aims to heal the dysfunction at home so that children can be reunited with their families. If that isn't possible, the children stay with their foster families until they are freed for adoption.

"We don't want children, particularly young children, languishing in foster care," Bailey says. "Having permanency—having permanent homes, a permanent family—is important for young children to develop."

T-PEP staff also counsel foster parents like the Hrabovskys.

"One of the things that we find ourselves saying here a lot of the time is that fostering has to be one of the hardest jobs in the world because you are asked to fall in love with a child and rear them as if they were your own and then be prepared to give them back when the time comes," Bailey says. "That's not easy."

Dr. Charles Zeanah, vice chair of Child and Adolescent Psychiatry

Dr. Mary Margaret Gleason, director of Tulane Infant Mental Health Services

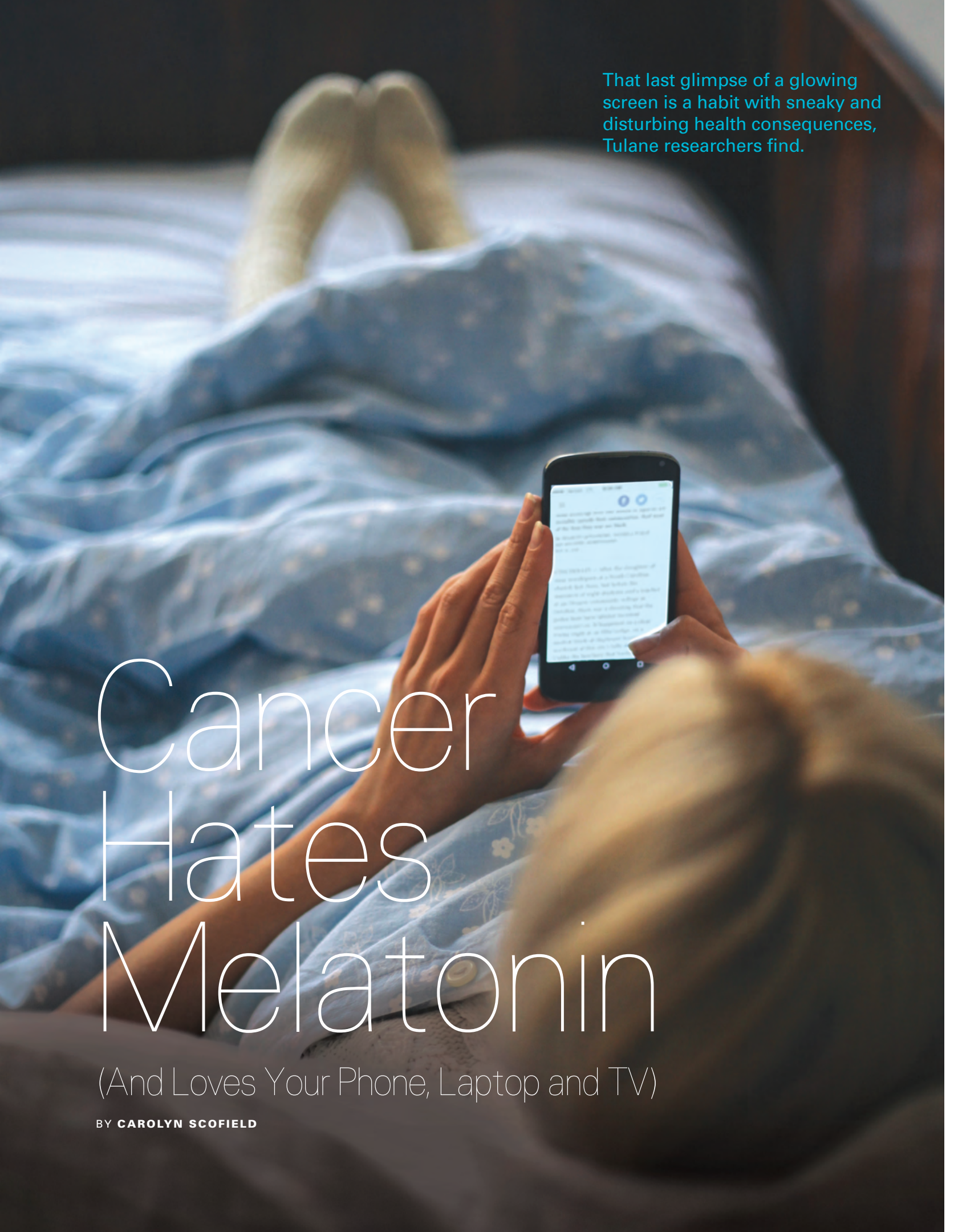
PHOTOGRAPHS BY CRAIG MULCAHY

Foster parents aren't the only ones who struggle. Many of the cases staff see are heartbreaking. Bailey remembers working with foster parents who were about to take in a little girl. The child walked right up to her and said, in a little voice, "You know, my momma and my daddy are dead, and they are with Jesus." The girl, who had witnessed her parents' violent death, was only 4.

Gleason says that staff are quick to support one another, stepping in for help when needed: "We all work in teams, and we all work together."

That support strengthens the group to stay focused on making a difference for children—throughout the institute.

"Success is a child feeling like they have a place in the world where they can count on someone," Gleason says.



That last glimpse of a glowing screen is a habit with sneaky and disturbing health consequences, Tulane researchers find.

Cancer Hates Melatonin

(And Loves Your Phone, Laptop and TV)

BY **CAROLYN SCOFIELD**

It's a nightly routine for so many people: brush your teeth, get in bed and check the phone one more time before turning out the light.

That last glimpse of the glowing phone screen is a habit a group of Tulane University School of Medicine researchers wants people to break. The reason: melatonin.

Melatonin is a hormone your body produces naturally at night when its circadian clock activates the pineal gland in the brain.

At least, that's how it's supposed to work but researchers in the Tulane Center for Circadian Biology are finding increasing evidence of circadian disruption and its profound impacts on health.

The study of different wavelengths of light and their effects on circadian rhythm goes back decades but still few universities and research facilities consider it a vital part of health.

"Students at Tulane School of Medicine are pretty fortunate because they get to learn about circadian biology and circadian disruption and we throw some melatonin stuff in there at them from time to time," says Dr. Steven Hill, director of the Tulane Center for Circadian Biology and the Edmond and Lily Safra Chair for Breast Cancer Research. "But there are many medical schools where this is not discussed."

Dr. David Blask, professor of structural and cellular biology at Tulane School of Medicine and the associate director of the Tulane Center for Circadian Biology, along with Hill first discovered the impact of melatonin on tumor growth three decades ago by incubating breast cancer cells in a petri dish with melatonin at levels comparable to what's found in human blood. They found that the hormone melatonin was a powerful anti-cancer hormone that suppresses tumor growth.

The research progressed into the study of light and how it affects circadian rhythm and melatonin levels. Volunteers gave blood samples during the daytime, when melatonin levels were low, at night when melatonin was high, and following light exposure at night when melatonin returned to low levels.

"Tumors are exquisitely sensitive to the amount of melatonin in the blood and respond precisely," Blask says. A high level of melatonin shuts down breast tumor growth, metabolism and signaling, he says. Low levels of melatonin during the day and after light at night exposure allow tumors to retain their rapid growth characteristics.

WHAT SHUTS DOWN THAT MELATONIN PRODUCTION?

Exposure to light at night, in particular light of blue and green wavelengths. It's an environmental concern that didn't exist several generations ago.

"What do we see with blue light now that we didn't see 20 years ago? We see iPads, iPhones, computers," Hill says. "If you're looking at these blue light-emitting devices before you go to bed, which we all do, that can delay your endogenous nighttime rise of melatonin for an hour to an hour and a half."

Blue light produces a higher amount of energy and comes from a variety of sources—the sun, TVs and fluorescent and LED lights. During the day, it helps increase alertness and elevate moods. The routine rise and set of the sun, and the natural blue light it produces, helps keep the circadian clock ticking.

Blue light at night has a much different effect, as the researchers found when looking at tumors.

"Exposure to light at night suppresses melatonin production by the pineal gland and tumors will sense that as though it's daytime and their activity shoots back up," Blask says.

TOTAL DARK AT NIGHT

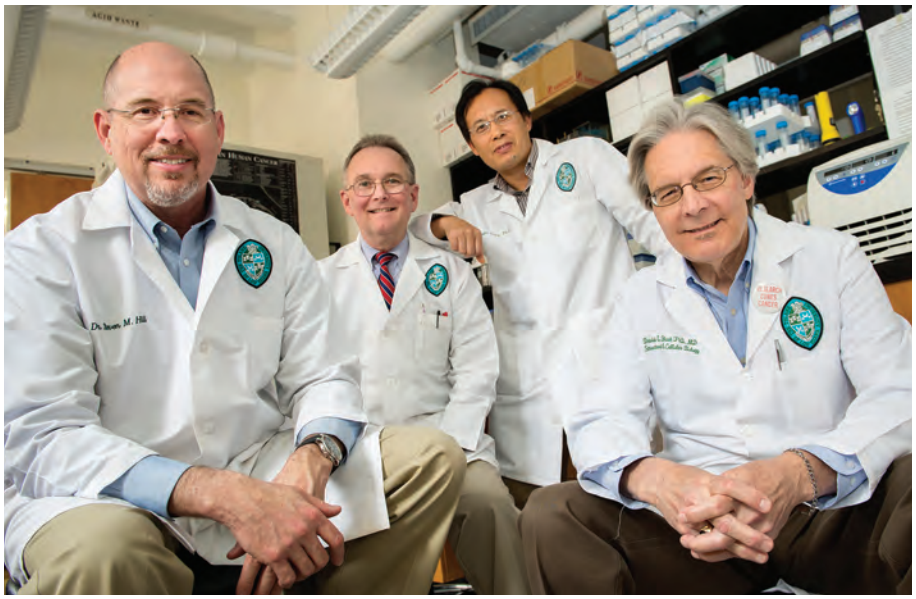
Tulane researchers grew tumors in rats, exposing the animals to different levels and durations of light. Once the tumors reached a certain size, the rats were administered 4-hydroxytamoxifen, a medication used to treat hormone-responsive breast cancer. Rats exposed to dim light at night had very little or no melatonin, and their tumors grew nearly three times faster than those in animals exposed to dark night. The tumors also were completely resistant to Tamoxifen.

Hill says tumors in rats with high melatonin levels "melted like butter" when treated with Tamoxifen. He noted that in their studies, Tamoxifen was administered in circadian alignment with the nighttime rise of melatonin, and not in the morning or during the day—as is the case with most patients.

"Just the change of light can make the tumors either intrinsically resistant to drugs or incredibly sensitive," Hill says. A similar pattern can be seen in humans and Tulane researchers plan to publish their findings this summer. The team mined a national database of more than 200 breast cancer patients. These women were part of a study being done by researchers at the University of North Carolina, University of California San Francisco and M.D. Anderson Cancer Center. Scientists there gave each patient individualized treatment after conducting RNA sequence and protein analyses of their tumor biopsies. Those researchers didn't specifically look for melatonin, but the analysis showed if the tumors had reduced levels of the MT1 melatonin receptor, only 30 percent of patients responded to this individualized neo-adjuvant therapy and were disease and metastasis-free after five years. However, if their tumor contained the full complement of the MT1 melatonin receptor, 98 percent of patients were disease and metastasis-free after five years.

Total darkness at night is the key to melatonin production.

"Sleep is not essential for melatonin to rise at night but complete darkness is," Blask says. "So theoretically you



Principal investigators and co-leaders of the Tulane University Circadian Cancer Biology Group, Dr. Steven Hill (left) and Dr. David Blask (right), and team members Robert Dauchy and Dr. Shulin Xiang.

could be awake, but if you're in total darkness, your melatonin will rise to hit its peak."

"Night shift workers and, more specifically, rotating night shift workers are at higher risk for circadian/melatonin disruption and for developing things like obesity and metabolic disturbances such as metabolic syndrome and Type 2 diabetes," Blask says. Interestingly, these are all known risk factors for breast, colon, prostate and other types of cancer. In fact, the World Health Organization in 2007 classified night shift work as a probable carcinogen because it disrupts circadian rhythm. When the body doesn't shut down at night, cardiovascular, metabolic, and hormonal balance and other important functions can all get disrupted.

This doesn't have to be the case for night shift workers, because the circadian rhythm can be reversed to produce melatonin during the day if the individual is able to get six to eight hours of total darkness consistently during their daytime sleep.

LED LIGHTS

Light-emitting diode, or LED lights, are becoming more common. They use less energy, tend to be more compact and radiate much less heat than incandescent lights and have a longer life span. LEDs can range in color and temperature from warmer white, which has more of a red-yellow tone to cool white, a bright blue-white color, much like cool white fluorescent lighting, often used in commercial spaces and office buildings.

Researchers at Tulane are investigating what impact LED technology may have on laboratory animals, their behavior, and metabolism and physiology.

"Because if LED light, high in emission of blue-appearing light, does make a difference metabolically and physiologically to the animal, then how do we compare the data from future studies done in LED light with the thousands of animal experiments that have been done and are currently being done in incandescent light?" says Robert Dauchy, manager of the Laboratory of Chrono-Neuroendocrine Oncology and instructor at Tulane University School of Medicine. "How might this emerging lighting technology impact various types of biomedical research currently underway to include clinical drug studies in addition to future research in labs around the world?"

MELATONIN SUPPLEMENTS

The effects of total darkness can be mimicked with a melatonin supplement, the kind you buy over the counter at a local store. The supplements deliver a much higher level of melatonin than the pineal gland produces, helping to recoup what damage light at night does.

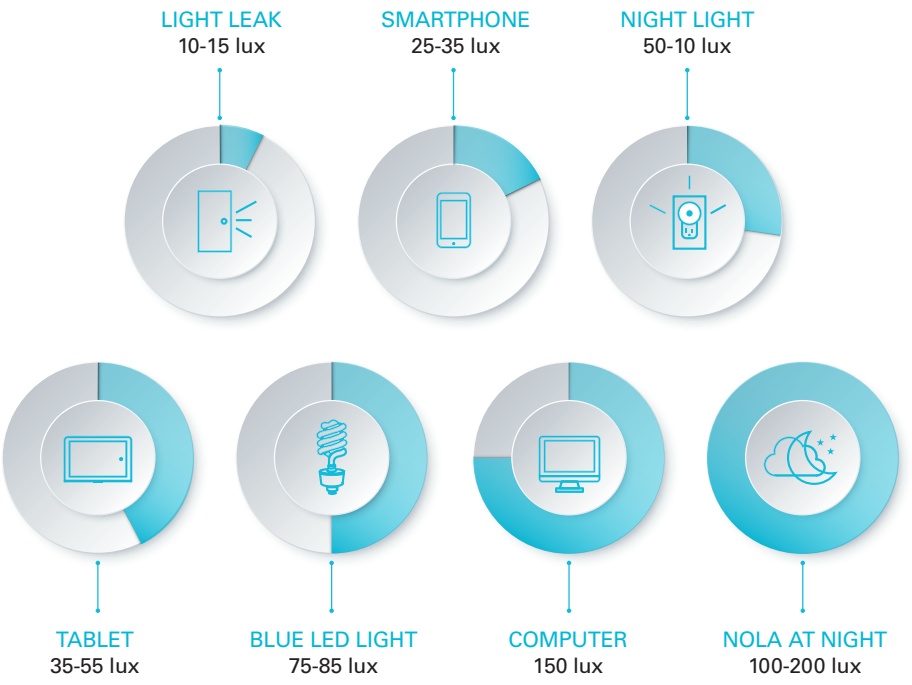
Researchers gave human subjects a melatonin supplement during the day when their levels would be low, taking blood samples before giving the supplement and an hour after. They then perfused this blood into human breast tumors in female rats. When breast tumors were perfused with the blood from subjects receiving the melatonin supplement, thus having higher levels of melatonin, many of the key signaling pathways that drive tumor growth were shut down.

A group of Italian oncologists studied the use of melatonin in combination with standard chemotherapy or hormonal therapy in the treatment of a variety of advanced-stage cancers. A meta-analysis of several of the randomized studies revealed that melatonin in combination with chemo- or hormonal therapy improved the efficacy of the standard therapy and led to a significant improvement in one-year survival while reducing the toxicity of the chemo- or hormone therapy.

None of the clinical trials were placebo controlled, double-blind studies. Researchers concluded that while melatonin is a necessary component of cancer treatment, it is not sufficient on its own.

"We have cancer patients calling us all the time for advice, telling us, 'We're at the end of our rope, we haven't responded to treatment,'" Blask says.

TURN IT OFF:
Reduce your blue light exposure at night



Lux is a measurement of light intensity. One lux equals one lumen per square meter.

"I think pretty much the way we put it is, 'Look, we're not in a position to give you a recommendation but if you decide you want to take melatonin, here's what you do."

THE ANIMAL MODEL

Researchers at Tulane University use a unique model to study the impact of circadian rhythm and melatonin on tumors, developed 40 years ago by Dauchy. He devised a way to grow tissue-isolated human tumors attached by a single artery and vein to rats. This allows researchers to evaluate tumor metabolism by measuring the contents of the blood going in and out of the tumor and study its metabolism in real time.

Dauchy came to Tulane in 2008 and one of his first projects was to rid the facilities of light at night. He says even the smallest amount of light, 20 to 30 times less intense than a nightlight, is enough to completely shut down the circadian system and melatonin production of a rodent.

Dauchy talks about his work around the world, recently earning a fellowship award through the Association for Assessment and Accreditation of Laboratory Animal Care International.

"Light contamination at night probably affects 99.9 percent of laboratory animals around the world so their systems are circadian disrupted to begin with," Dauchy says.

"This may be part of the reason more than 80 percent of drugs fail clinical trials. If you think about it, it may be an underlying reason about the timing situation that these drugs do in fact work."

ELECTRONICS ADAPTING

Apple is one company paying attention to the research on blue light and circadian rhythms. The company's latest operating system includes a new feature called Night Shift, which uses the device's clock and geolocation to determine when it's sunset. The display automatically shifts to warmer colors at night, returning to regular settings in the morning.

Apps like Twilight, Bluelight Filter and f.lux also work to reduce the amount of blue light emitted by electronic devices at night.

THE FUTURE

Doctors have long been recommending a good night's sleep and now researchers at Tulane know the body's natural circadian rhythm functioning properly is a key to good health.

"We all have cancerous cells in our bodies when we reach a certain age," Hill says. "It's a question of how big the tumor is and whether it's going to become clinically relevant. If you're only getting five hours of melatonin at night to shut down the growth of that tumor, the rest of the time that tumor is growing like crazy, it is probable your tumor is going to become relevant much earlier. It depends."

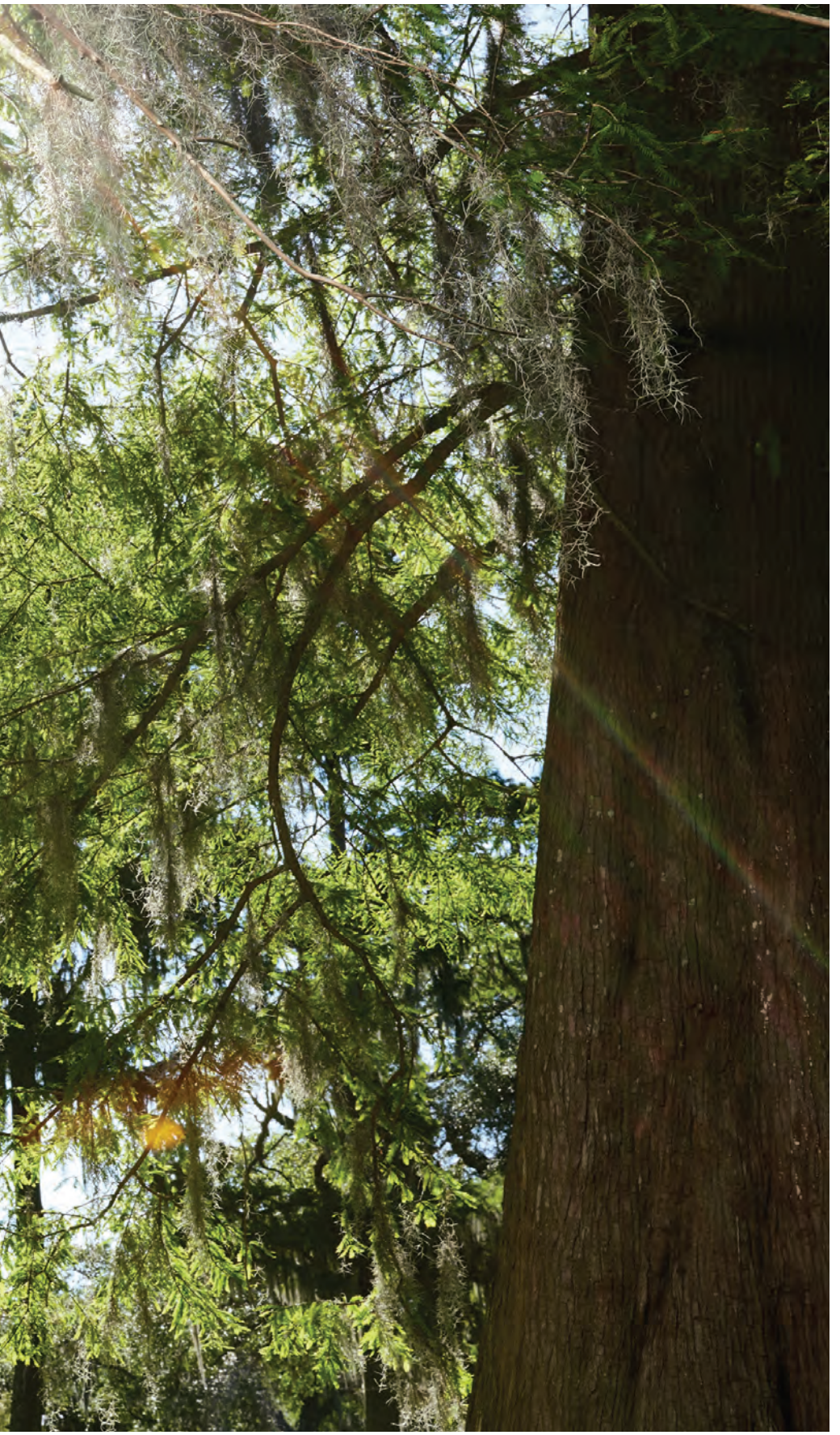
These doctors recommend turning off electronics at least an hour before going to sleep and eliminating any light coming into the bedroom. It could make all the difference.

"We think that the Circadian Cancer Biology Group and the Tulane Center for Circadian Biology are positioned to conduct studies that will provide the data and evidence necessary to highlight the risks associated with the environmental contamination resulting from electrical lighting at night," Hill says. "We're really working hard to see that through."

HUNTING ACADIANA'S SILENT KILLER

BY **KIRBY MESSINGER**

Dr. Jordan Karlitz, associate clinical professor of medicine and director of the GI Hereditary Cancer and Genetics Program at Tulane



When he began working at Tulane University School of Medicine in 2008, gastroenterologist Dr. Jordan Karlitz came across something interesting. He noticed that more and more of his young patients suffering from colorectal cancer had French last names.

"I'm originally from New York, so these French last names definitely stood out," says Karlitz, associate clinical professor of medicine and director of the GI Hereditary Cancer and Genetics Program at Tulane. "It prompted a lot of questions, and I started looking into Louisiana's Cajun population."

South Louisiana is home to hundreds of thousands of Cajuns, descendants of French colonists who settled in Acadia in northeastern Canada, and then migrated to Louisiana. The Acadian region of Louisiana (called Acadiana) includes 22 parishes and stretches from just west of New Orleans to the Texas state line. Since their establishment in Louisiana, the Cajuns developed their own dialect, Cajun French, and a vibrant culture with distinct music and cuisine (made famous worldwide by the late chef Paul Prudhomme).

"When I reviewed the scientific literature on the Cajun population, I discovered that they were a founder population of several genetic diseases, including Tay-Sachs and Usher syndrome," says Karlitz. "I thought there might be some connection between this group and the high rates of colorectal cancer."

FOLLOWING A HUNCH

Karlitz began combing through census data to determine which parishes in Louisiana were home to the largest numbers of French speakers, indicative of those with Cajun ancestry. He further narrowed his focus to the nine parishes with the highest rates of French speakers.

"Despite the fact that many Cajuns no longer speak French as a

FOLLOWING A HUNCH

1st
Trace patients' French last names to Acadiana and focus on nine parishes with the most Cajun ancestry.

2nd
Research cancer data in those nine Cajun parishes.

3rd
Breakthrough discovery: colorectal cancer rates among whites in Acadiana are some of the highest in the U.S.

first language, the language data we found provided us with an objective way to identify parishes that have a large percentage of inhabitants with Cajun ancestry," says Karlitz.

Karlitz then worked with the Louisiana Tumor Registry, a statewide population-based cancer registry and participant of the Surveillance, Epidemiology, and End Results (SEER) program, to analyze cancer rates in those parishes with a high proportion of French speakers.

He discovered that in Acadiana, colorectal cancer rates in whites were among the highest in the U.S. and in that concentrated nine parish region, white males had colorectal cancer rates that were the highest in the U.S. compared with other white male populations. There also appeared to be a trend of increased colorectal cancer rates in young patients under age 50. These results were recently published in *Clinical and Translational Gastroenterology*, a journal of the American College of Gastroenterology.

"Our data suggests that there is something unique about the white population, and particularly the white male population in the Acadian parishes in regards to colorectal cancer," says Karlitz.

THE BIG QUESTION: WHY?

Finding a link between colorectal cancer and Acadiana is just the beginning. Karlitz is now focused on learning why that link exists. He wondered if the cause is environmental.

"We looked at other cancers that share environmental exposures with colorectal cancer such as breast cancer, pancreatic cancer, and lung cancer to see if those cancers were also high in the Acadian region," says Karlitz. "We even looked at smoking, obesity and health insurance rates in the region, and there appeared to be no difference in these variables with regard to Louisiana rates."

Although he plans to carefully assess environmental risk factors to see if there are other factors at play, Karlitz is now investigating whether genetic predisposition contributes to these high rates of cancer. Aided by a grant from the Louisiana Clinical and Translational Science Center, his second study is focused on tumor testing to determine whether colorectal patients in the Acadian region have high rates of Lynch syndrome, the most common form of hereditary colorectal cancer. If Lynch syndrome rates are high among young white patients in Louisiana, this could signify a founder effect for Lynch syndrome in Acadiana.

"Our data suggests that there is something unique about the white population, and particularly the white male population in the Acadian parishes in regards to colorectal cancer."

—DR. JORDAN KARLITZ

"Founder populations are important to study because potentially novel cancer susceptibility genes may be discovered that may be important not only for the population in question but for others worldwide who may share a similar remote ancestry," Karlitz says.

Karlitz also worked with the Louisiana Tumor registry to analyze Lynch syndrome screening practices in young colorectal cancer patients statewide. This work was recently published in the *American Journal of Gastroenterology* and demonstrated that only 23 percent of patients age 50 and under were screened for Lynch syndrome even though guidelines at the time of the study suggested that all patients be tested.

"We really need to be doing testing on tumors," says Karlitz. "It is critical to identify Lynch syndrome because mutation carriers are at high risk to develop colorectal cancer and a variety of other cancers. In addition, as the syndrome is inherited in an autosomal dominant fashion, it can be passed on to 50 percent of family members. We found a particularly low rate of screening in public facilities—six percent—which highlights important issues regarding healthcare disparities."

Karlitz hopes that all colorectal cancer patient screenings across the country will include the Lynch syndrome tumor testing. Increased testing would help identify hereditary cancers, aiding surveillance and early cancer detection.

DEADLY BUT PREVENTABLE

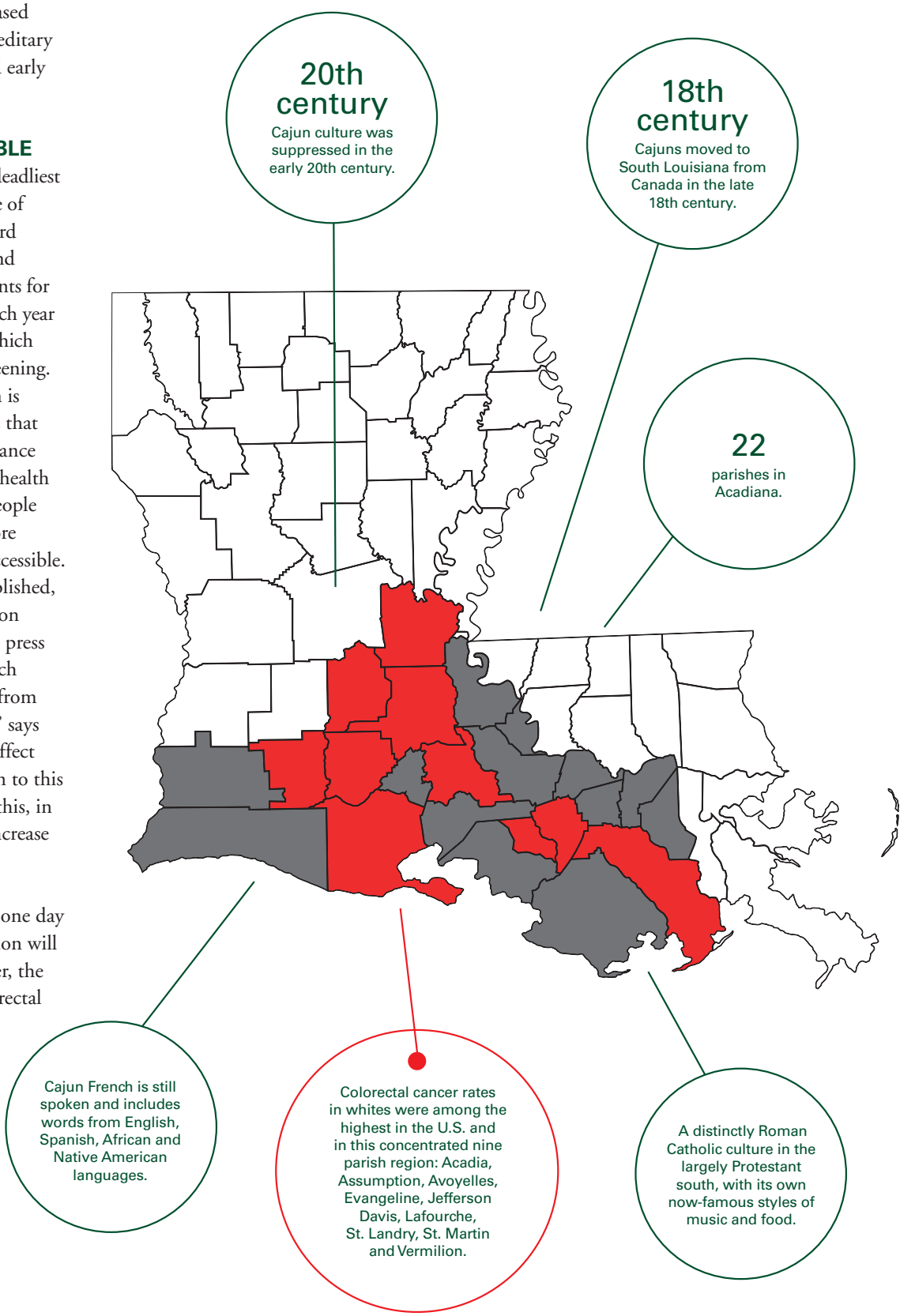
Colorectal cancer is one of the deadliest types of cancer, but it is also one of the most preventable. As the third most common cancer in men and women, colorectal cancer accounts for approximately 50,000 deaths each year in the United States, many of which could be prevented through screening.

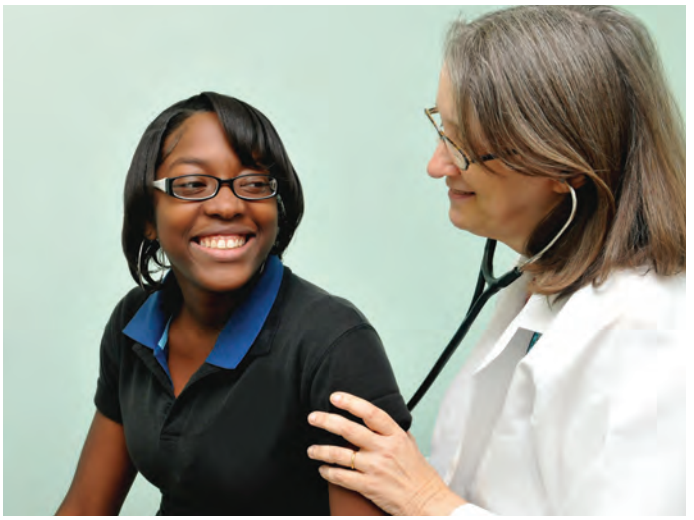
That's why Karlitz's research is so important. He says he hopes that raising awareness of the importance of colorectal cancer as a public health priority will encourage more people to get screened and provide more resources to make screenings accessible.

"After the findings were published, with regard to the Acadian region specifically, there were multiple press releases to the community, which led to multiple media requests from newspapers and radio stations," says Kartliz. "It was a real domino effect that has helped attract attention to this region and we are hoping that this, in turn, will attract resources to increase colon cancer screening rates."

Karlitz hopes to maximize screening rates, and hopes that one day 80 percent of the U.S. population will be screened for colorectal cancer, the target set by the National Colorectal Cancer Roundtable.

Cajun Cancer: Understanding Acadiana





Brinton Family Health and Healing Center serves the Mid-City and Treme neighborhoods in New Orleans.

Continuing a Legacy

THE BRINTON FAMILY HEALTH AND HEALING CENTER

After California philanthropist Mary Jane Deere Wiman Brinton saw the news coverage of the Deepwater Horizon oil disaster, she was moved to support Tulane University and its work within the New Orleans area. Now her family is continuing their mother's legacy of philanthropy with a new gift to the Brinton Family Health and Healing Center.

In October 2010, Mary Jane Brinton gave a $1.9 million gift to Tulane University School of Medicine. This extraordinary gift was the catalyst for what is today the Ruth U. Fertel/Tulane Community Health Center in Mid-City. Based upon the guidance by her son, Bill, and his wife Gerry, Mary Jane's gift enabled Tulane to provide high-quality primary care to low-income members of the community while enabling Tulane physicians and other healthcare workers to gain hands-on experience. That gift created the Brinton Family Health and Healing Center, whose patient-centered approach to primary care and preventative medicine has become a much-needed community resource and centerpiece of the Mid-City and Treme neighborhoods.

During the past six years, New Orleans has become a special place to Mary Jane's family. The Brinton Center and the work of the School of Medicine in the community have benefited from their committed leadership and vision. Touched by the impact the Brinton Family Health and Healing Center has had on the people of New Orleans and the community at large, this winter, Bill, Gerry and Mary Jane's daughters Delia and Katherine were moved to do more for the center. Their latest gift will expand the center's current primary care services and bring additional services and resources to the still-underserved community.

Expand Clinical Programs and Support

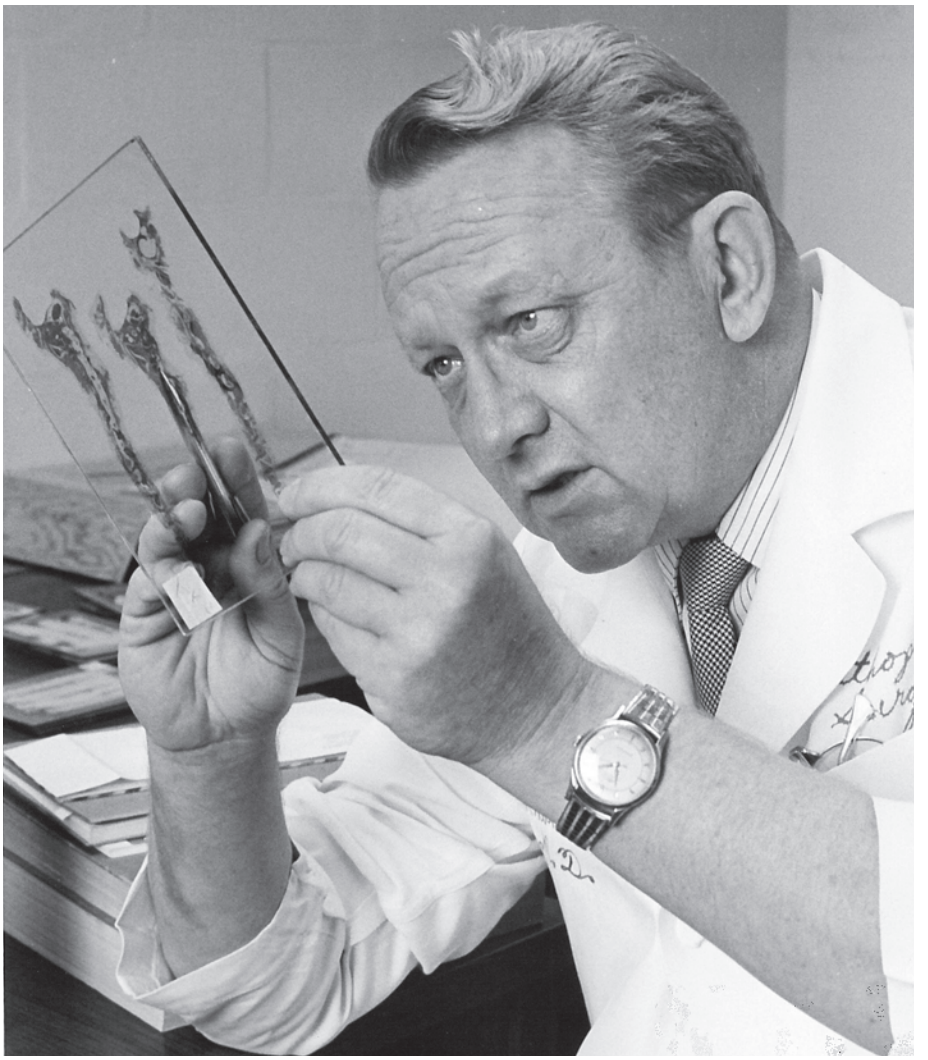
"This gift will allow us to expand our clinical services and the programs offered by our community health workers," says Dr. Ashley Wennerstrom, assistant professor of clinical medicine and director of the Louisiana Community Health Worker Institute. "We will be able to offer additional support for community members experiencing mental health issues and better serve the local Latin American population."

Wennerstrom notes that the Brintons have spent time in the clinic and that they know firsthand what is needed to better serve the community. For example, this latest Brinton family gift will allow community health worker Fernando Sosa to work more closely with underserved, Spanish-speaking community members who often have trouble accessing community resources and primary care services.

"While we are providing clinical services to the underserved, we are also training the health workforce," says Wennerstrom. "It is so exciting to be teaching a whole new model of health care that focuses on improving the health of entire communities rather than just individuals."

The Brinton funding will also provide training support for medical students and residents to be able to learn new models of holistic and preventative health care at the center.

"We are so fortunate to have this gift from the Brintons," says Wennerstrom. "We are delighted that this incredible family is continuing a legacy of support and leadership in developing innovative approaches to improving community health."



Dr. Jack Wickstrom, longtime chair of the Tulane Department of Orthopaedics.

Honoring the Work

BETTE AND JACK KENNETH WICKSTROM, M.D. ORTHOPAEDICS EXCELLENCE ENDOWMENT

When Merrilee Wickstrom Kullman and Charles Wickstrom decided to honor their mother and father, they knew the perfect place: the Tulane University Department of Orthopaedics.

"My parents gave me everything," says Charles. "You can't repay those kinds of things, but you can do a little to show your appreciation. Tulane was so important to my life and to theirs."

Dr. Jack Wickstrom was the longtime chair of the Tulane Department of Orthopaedics. Though Wickstrom and his wife Bette are now deceased, their work lives on in the lives of countless patients and Tulane orthopaedists.

> "My dad never took a vacation. His CV was the size of a phone book. He often said he knew he had been saved during World War II to teach, and it really meant everything to him."
>
> —CHARLES WICKSTROM

Over the course of his career, Wickstrom published dozens of books and papers and participated in more than 80 scientific presentations all over the world. Known to friends and colleagues as "Cactus Jack," he was influential in creating a biomedical engineering department at Tulane and conducted several notable studies on whiplash and rear-end collisions in automobiles.

"My dad never took a vacation," says Charles. "His CV was the size of a phone book. He often said he knew he had been saved during World War II to teach, and it really meant everything to him."

Merrilee and Charles created the Bette and Jack Kenneth Wickstrom, M.D. Orthopaedics Excellence Endowment to aid the next generation of Tulane orthopaedists. Both Merrille and Charles hope to grow the fund in order to create a chair.

"Eventually I would love to see the funds raised to the chair level," says Wickstrom. "It would be wonderful to be able to bring in top quality people and help Tulane maintain its high standards of excellence."

Remembering

Dr. Harold R. Neitzschman Jr., Chair, Department of Radiology

Dr. Harold Neitzschman served as the chair of the Tulane School of Medicine Department of Radiology for 11 years. He will be remembered for his remarkable attitude in the face of cancer and his warm cheer and love of Tulane.

Neitzschman completed residencies in pediatrics and radiology, and later a fellowship in nuclear medicine. He was board certified and fellowed in pediatrics, radiology and nuclear medicine and held memberships in those academies. He held academic appointments in both pediatrics and radiology. Neitzschman began his career at Tulane School of Medicine in 2000. He was instrumental in retaining key faculty and rebuilding the radiology residency program following Hurricane Katrina.

Beside his clinical, educational and academic accomplishments, Neitzschman was known for his great spirit, no matter the challenge at hand. He was a thoughtful, constructive leader among his colleagues, beloved by all who worked with him.

Dr. John Walsh, Chief of Pediatric Neurosurgery, Professor of Neurosurgery

Dr. John Walsh made monumental contributions during his time of service at Tulane University, achieving an international reputation in neurosurgery for his work. He will be remembered as an outstanding technical neurosurgeon who was exceedingly compassionate and humble, as a nationally funded investigator who advanced the specialty and as a gifted educator who enriched the lives of many residents and trainees over the course of his career.

Walsh achieved national and international acclaim for his clinical and academic work on brain tumors, stereotactic radiosurgery and pediatric neurosurgery including craniofacial disorders. He worked tirelessly to provide the best care for his patients, who travelled from throughout the Gulf South and beyond to see him. He was devoted to improving the care of tomorrow's patients through his research.

Walsh was steadfastly dedicated to the residency training program and his passion for teaching was apparent to all who had the good fortune of learning under his tutelage. He was a stabilizing force and leader during the challenging initial years following Hurricane Katrina and is a primary reason why the training program thrives today.

In honor of Dr. John Walsh, we ask you to please consider contributing to the John W. Walsh, M.D., Ph.D. lectureship in pediatric neurosurgery, which will recognize Walsh's lifelong contributions to our program and neurosurgery, in perpetuity.

'45 **Dr. Gerald Berenson (A&S '43, R '51)** was recognized by the Louisiana State Medical Society with the LSMS Physician Award for Community Service at its annual House of Delegates meeting in Shreveport, La.

'47 **Dr. Erwin Hecker (A&S '44)** is 92 years old!

'49 **Dr. Nollie Felts** has had CLDP for three years but has almost no pain and still plays bridge.

Dr. Michael Blais is 95 years young!

'51 **Dr. John "Jack" McNulty** published an article called "Fifty Eight Years as a Palliative Medicine Physician" in the *Journal of Palliative Medicine*.

'53 **Dr. James Reynolds (A&S '50, R '58)** moved to Lambeth House in New Orleans.

'54 **Dr. Richard Clark (R '59)** and his wife Jere (NC '53) are still up and about—multiple children, grandchildren, bridge, hunting, fishing, farming and retiring are full-time efforts!

'55 **Dr. George Cary** is coauthor of a medical paper that was presented in Russia at the Baikal Conference. The paper is titled "Biomarkers of Traumatic Head Injuries: the Case for Glutamate Receptors."

Dr. Marion Winkler is still playing tennis twice a week.

'56 **Dr. Ira D. Rothfeld (A&S '53)** was honored as Person of the Year by the Shomrim Society of the New York City Police Department. A practicing otolaryngologist in New York, Rothfeld has been an honorary police surgeon for 35 years. He founded the Society of Honorary Police Surgeons of the NYPD. He completed his 50th year of practice.

'57 **Dr. Julius Levy Jr. (A&S '54)** received the Anne Goldsmith Hanaw and J. Jerome Hanaw Tikkun Olam Award for Campaign Excellence from the Jewish Federation of Greater New Orleans and the Jewish Endowment Foundation of Louisiana at the organizations' annual meeting.

'58 **Dr. Robert Brumfield (A&S '55, R '62)** is still working part-time evaluating new and post-op orthopaedics patients one day a week.

'60 **Dr. Victor Gonzalez (G '60, F '64)** is working part-time in telemedicine and telepsychiatry with nursing homes in Georgia and Alabama.

Dr. Henry Watanabe is doing well and teaching at the School of Medicine at the University of Nevada in Reno.

'61 **Dr. Richard Dale** mourns the loss of classmate **Dr. John Puckett (A&S '58)**, one of the greats of their class.

'62 **Dr. Jack Hoover** serves as president of the Mississippi Maritime Museum and is a board member of the Gulf Coast Symphony.

'63 **Dr. John Wilson (A&S '60, G '63)** retired with the title of LSUHSC Department of Pediatrics Professor Emeritus and received a commendation from the Louisiana Board of Supervisors for his accomplishments in making an impact on the care of children.

'64 **Dr. James White (A&S '61, R '72)** was inducted into the Louisiana State Medical Society Hall of Fame on account of his long-term meritorious service and valuable leadership to the organization.

'65 **Dr. Stuart Frank (A&S '61)** announces his engagement to Ms. Nancy Mizrahi of Sarasota, Fla.

'67 **Dr. Russell Steele** was named editor of *Clinical Pediatrics and Global Pediatric Health* journals, as well as the infectious disease section of *E Medicine*.

Dr. Warren Wheeler is the senior director of palliative medicine at Nathan Adelson Hospice in Las Vegas.

'69 **Dr. Edward Soll** was installed as president of the Jewish Federation of Greater New Orleans.

'70 **Dr. Bruner Bosio** retired after 40 years of OB-GYN practice.

'71 **Dr. Lawrence Galinkin** retired from private pediatric practice and now serves on the faculty at Hofstra Medical School as a facilitator for first- and second-year students.

'72 **Dr. Andrew Schwartz (A&S '68, R '74)** is now an Emeritus Associate Professor of Orthopaedic Surgery and Pathology at UCLA.

'73 **Dr. Glenn Libby** is enjoying retirement with his wife Gael, staying active and traveling.

Dr. Frederick "Rick" Lukash (A&S '69) published his second in a series of books on body image and self-esteem.

'74 **Dr. Kirk Bellard (R '77)** retired from Napoleon Pediatrics in New Orleans, and is now enjoying traveling around the globe with his wife Ann.

Dr. Sherry Braheny retired from clinical practice. She continues to serve as medical director of Sharp Grossmont Hospital's stroke program.

Dr. Bruce Samuels (I '75, R '77) enjoyed his 40th class reunion last year and is looking forward to the 45th.

'77 **Dr. Michael Lam (I '77, R '79)** is a board certified cardiologist with Owensboro Health's One Health medical group, offering specialty heart care to the Madisonville, Ky., community.

'78 **Dr. Kenneth Melton** is currently the president of Carolina Kidney Care in Fayetteville, N.C., and is also teaching nephrology at Campbell University School of Osteopathic Medicine as an adjunct faculty member.

'79 **Dr. William Hardin (R '84)** is currently serving in the role of associate chief medical officer for the Children's Hospital Colorado and professor of surgery and pediatrics at the University of Colorado School of Medicine.

In Memoriam

'44 Dr. August B. Turner

'45 Dr. Hyman C. Tolmas

'48 Dr. S. H. McDonnieal Jr.
Dr. Ralph R. Reed

'49 Dr. Malcolm B. Burris

'50 Dr. Elvin B. Noxon

'51 Dr. William W. Richardson
Dr. Leonard J. Rolfes
Dr. Rayford A. Smith Jr.

'52 Dr. Carolyn R. Denning
Dr. John A. Edwards Jr.

'53 Dr. Richard M. Nunnally

'55 Dr. Ben J. Kitchings
Dr. John W. Manning Jr.
Dr. Howard K. Suzuki
Dr. Robert B. Townes Jr.

'56 Dr. G. Douglas Tatum Jr.
Dr. Paul R. Tennis

'57 Dr. T. Erskine Ross III

'58 Dr. Billy B. Kern

'59 Dr. Charles L. Webster Jr.

'61 Dr. Arthur E. Lewis
Dr. John P. Puckett Jr.

'62 Dr. Marion E. Cockrell Jr.
Dr. Douglas W. Greve
Dr. Dennis F. Moore

'63 Dr. Harry L. Colcolough Jr.
Dr. Robert W. Mackey

'65 Dr. El-Sayed H. Hegab
Dr. Arnett D. Smith Jr.

'67 Dr. George L. Adams

'68 Dr. James R. Allen
Dr. William P. Fitch III

'70 Dr. Frank W. Crast Sr.

'72 Dr. William E. Wright

'73 Dr. J. Michael Barrett

'74 Dr. Stephen N. Horwitz

'76 Dr. Harry A. Luscher

'77 Dr. Kathleen McGrady

'94 Dr. Rebecca Hartwig

'02 Dr. Vincent C. Michell

'03 Dr. Kiersten Rickenbach Cerveny

'10 Dr. Rachel V. Pearline

Dr. Gwenesta Barnum Melton is co-founder and vice president of the Association of Women in Rheumatology, a nonprofit organization that promotes leadership in rheumatology. She continues teaching skills at Campbell University School of Osteopathic Medicine in N.C.

'81 **Dr. Andrew Auerbach** is currently the chief of emergency medicine at the Dallas VA Medical Center.

'82 **Dr. Warren Bourgeois (E '78, R '87)** has a daughter, Camille, in her second year at Tulane School of Medicine. Roll Wave!

Aesthetic Everything, a social network for professionals in the aesthetic industry, named **Dr. Paul Vitenas (A&S '77)** to the list of the "Top 10 Plastic Surgeons Middle America Region" for 2015. He is founder of Vitenas Cosmetic Surgery in Houston. He is featured on the Aesthetic Everything website, along with a video of Vitenas explaining the best ways for patients to choose their breast implant size.

'83 **Dr. Christine Chang (PHTM '83)** and Dr. David Campen have a daughter, Natalie, who was has been accepted to medical school at USC.

Dr. Michael Puyau works in acute care surgery at Woman's Hospital in Baton Rouge, La. He also works with current Tulane medical students in the LEAD program along with his wife, **Dr. Susan Puyau (M '86, R '90)**, who is the Chief Medical Officer.

'86 **Dr. Judith Anderson (NC '81)** has joined Professional Park Associates in Lafayette, Ga. Following her medical degree from Tulane University School of Medicine, she completed her internship and residency in pediatrics and a fellowship in allergy/immunology at University Medical Center in San Diego, Calif.

Dr. Susan Puyau (R '90) is the Chief Medical Officer at Woman's Hospital in Baton Rouge, La.

Dr. Mark Webb has a daughter, Cecilia, in her second year at Tulane University School of Medicine.

'87 **Dr. Alec Hirsch (A&S '83)** is chief of surgery at Woman's Hospital in Baton Rouge, La., and is an adjunct assistant professor at Tulane School of Medicine, where he teaches third-year LEAD students on surgery rotations.

Dr. George "Bud" Rees (R '92) just joined Florida's Baptist Medical Group. He is a board-certified general surgeon.

'90 **Dr. Ralph Katz (A&S '83, G '87, R '91)** became the president of the Jefferson Parish Medical Society.

'92 **Dr. Tomiko Stein (PHTM '92)** is working at Kaiser Permanente in Southern California as an HIV and infectious disease specialist.

Dr. Paul Steinwald is part of a plastic surgery practice, The Center for Cosmetic Surgery, serving patients from Colorado Springs, Fort Collins and surrounding areas. The Center uses CoolSculpting, cleared by the FDA in 2010 as a body contouring procedure for the abdomen and flanks, and now includes FDA-cleared applicators that target the thighs and the neck to reduce the fat that causes a double chin. The system uses a process called Cryolipolysis to destroy fat cells by freezing them without damaging a patient's skin.

Dr. Margaret Parsons-Sander (R '93, R '96) was recently elected to the California Medical Association Board of Trustees, and is a managing partner of Dermatology Consultants of Sacramento, Calif.

'00 **Dr. Bren Boston Padawer (NC '96, R '01)** is now working at the Akasha Center for Integrative Medicine in Santa Monica, Calif.

'02 **Dr. Peter Van Geertruyden** recently completed a fellowship in musculoskeletal radiology at Thomas Jefferson University. He now lives in Alexandria, Va., with his wife Jessica and their children Luc, 4, and Claire, 1.

'04 **Dr. John Villacis (F '04)** has been elected as board chairman of the Austin Diagnostic Clinic (ADC). Villacis serves as the 11th chairman of the board since the clinic began in 1952. Villacis has been an allergy and immunology specialist in Austin, Texas, for more than 12 years. He will continue his clinical practice at ADC North and Circle C, and balance this with leading the multi-specialty clinic.

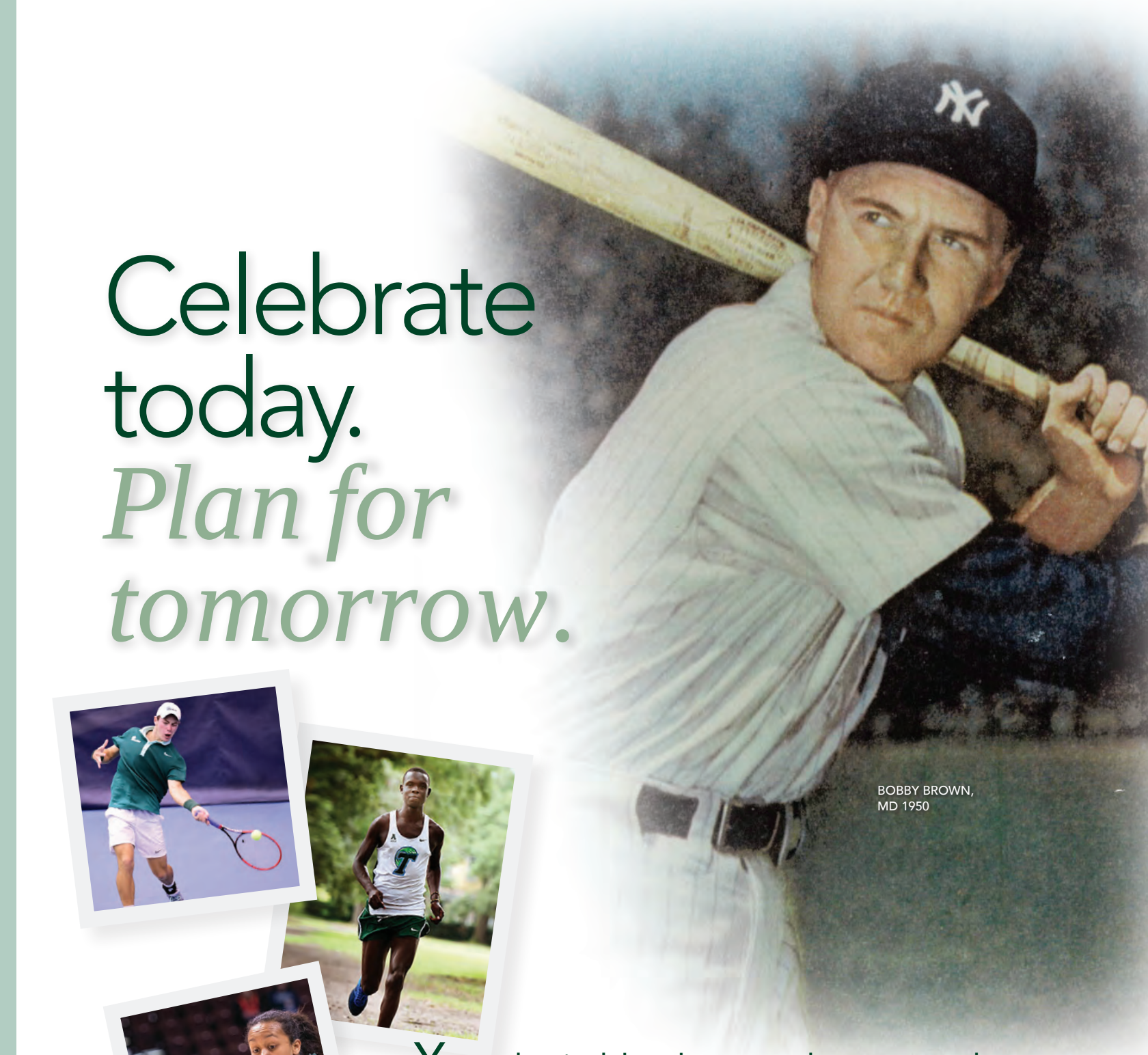
'08 **Dr. Ajay Tejwani (PHTM '08)** uses radiation as a tool in treating cancer patients. "Patients may need chemotherapy, surgery or radiation—or any combination of the three, depending on their diagnosis and stage of disease," he said. The radiation oncologist is one piece of a new cancer care program in Ottawa, Kan. A partnership between Ransom Memorial Hospital and Lawrence Memorial Hospital, the program aims to provide a more comprehensive approach to cancer treatment.

'12 **Drs. Shubho Sarkar (SE '08)** and **Stephanie Losq** finished their respective residencies in North Carolina, moved back to New Orleans and got married! Sarkar finished at Brenner Children's Hospital at Wake Forest and joined a pediatric private practice—Lake Vista Integrative Pediatrics. Losq finished her family medicine residency at Cone Health and joined Access Health Louisiana at the St. Bernard Community Health Center.

'13 **Dr. Justin Hayes (S&E '07)** is headed to the University of Alabama, Birmingham, for a fellowship in infectious diseases (ID) effective July 1, 2016. At present, Hayes is in residency in internal medicine at Our Lady of the Lake Hospital in Baton Rouge, Louisiana, and is a member of the infection control committee. His primary interests in ID include stewardship and healthcare-associated infections.

Drs. Erik Romanelli (PHTM '13) and **Kayleen Bailey (PHTM '13)** welcomed their daughter Tula on January 21. Tula was named after their immense Tulane pride! Romanelli has one more year of residency in anesthesia at Montefiore Medical Center in the Bronx, N.Y., and Bailey is going to start a Peds Hematology/Oncology fellowship at Sloan Kettering this June.

Celebrate today. *Plan for tomorrow.*



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