

FINDINGS

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New Lease on Life

How Liz Haughey turned the tide
against a mystery illness



We give to support clinical research that helps Oklahoma patients and grows our local economy.

Lori & Bond Payne



Bond and Lori Payne





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Marking 70 years of life-changing discoveries

Chartered in 1946, OMRF is an independent, nonprofit biomedical research institute dedicated to understanding and developing more effective treatments for human disease. Its scientists focus on such critical research areas as cancer, diseases of aging, lupus and cardiovascular disease.

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Keeping Osteoporosis at Bay

Dear Dr. Prescott,

I am a 53-year-old postmenopausal woman and have been diagnosed with osteopenia (low bone density) in my spine and hips. I run about 15 miles a week and participate in barre, Pilates and yoga weekly. I also take calcium, magnesium and vitamin D supplements daily. My mother had osteoporosis, and my two older sisters have it, too. My doctor has suggested increasing my vitamin D supplement and trying osteoporosis-preventing drugs like Boniva or Fosamax. My sister had bad reactions to both and takes Evista, another such drug. What can I do to avoid osteoporosis?

*Roberta Roush
Oklahoma City*

Bone is a living tissue and needs to be constantly broken down and replaced. Osteoporosis occurs when your body simply can't keep up with this natural process.

In osteoporosis, bones become weak and brittle to a point where a fall, or even something as innocuous as bending over to pick up the morning paper, can result in a bone fracture. These fractures most commonly occur in the hips, wrists and spine.

Your doctor has diagnosed you with osteopenia, a condition that puts you at an increased risk for osteoporosis. Unfortunately, osteopenia can't be cured, but there are ways to lower your risk of developing osteoporosis.

Exercise, calcium intake, vitamin D supplements and talking through options with your doctor are all key. Assuming you eat a well-balanced diet with plenty of dairy, fish, fruits and vegetables and don't smoke, it appears you've checked off all the right boxes.

That brings us to the not so good news. If your loss of bone density continues to progress, it might be outside of your control, as you possess the two most significant risk factors for osteoporosis: family history and being postmenopausal.

Devising the best plan for you is tough without your exact bone density scores. But I'm guessing your physician recommended drug therapy because he or she may have noticed a trend in your scores and because of your family history.

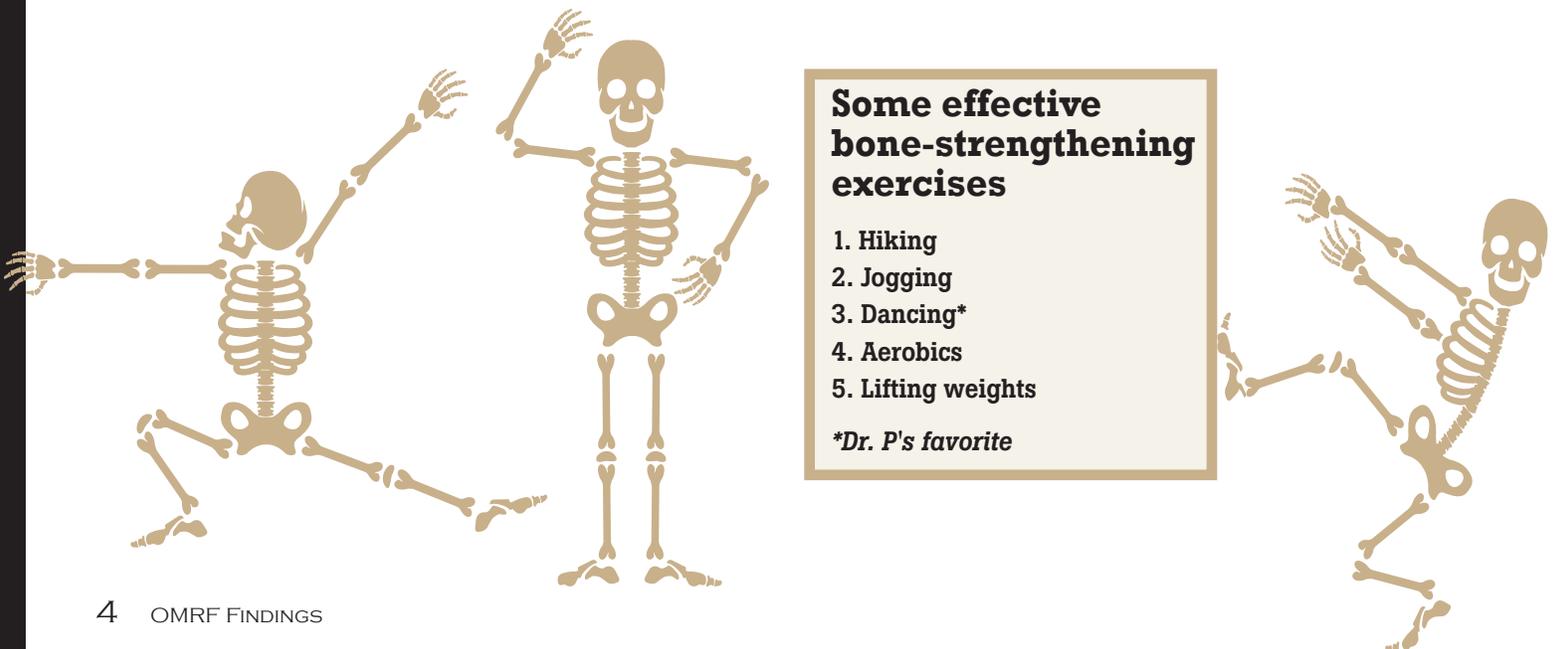
One other option you might discuss with your doctor is estrogen replacement therapy. This treatment replaces hormones the body no longer makes in menopause. It's typically a good preventative for osteoporosis, but it often carries side effects as well as an increased risk of certain cardiovascular diseases.

The bottom line is to stay on your current course. Continue to exercise, because remaining strong after menopause can go a long way to keeping your bones intact. And stay in touch with your doctor and keep asking lots of good questions like these!

Some effective bone-strengthening exercises

1. Hiking
2. Jogging
3. Dancing*
4. Aerobics
5. Lifting weights

**Dr. P's favorite*



Seed Sower

A farmer's son helps clients leave a legacy

Jerry Balentine learned the importance of hard work alongside his father at his family's dairy farm in rural Garvin County. As a teen, even summer vacations centered around tilling the soil, planting the crops, caring for livestock and maintaining the dairy operation.

Today, it's hard to imagine Balentine milking cows and slopping hogs. An attorney who's spent more than four decades helping clients create estate plans, he now favors dark suits and starched shirts (but no tie). Still, the lessons he learned during his childhood in south central Oklahoma have carried him through life and helped him find purpose and success in his career.

"You learn a lot about people when living in a small town like Maysville," Balentine says. "I have been truly blessed with people who believed in me and wanted me to be successful. That was such a powerful influence, and it's led me to try to remember to do the same for others."

After spending his early years on the farm, Balentine decided to choose a path different from his father's. At the University of Oklahoma, he earned a Doctor of Pharmacy degree and eventually opened his own pharmacy. While he enjoyed the work, he found he wanted something that brought him closer to people and their families. So at 32, he enrolled at the Oklahoma City University School of Law; he opened his own law office following graduation.

Today, he's beginning his 42nd year of practicing law. His work centers around helping people create plans to protect their assets and their families in the event of disability or death. "When I sit down with clients, we talk about everything they own and the people they care about," he says. "That's an incredible opportunity."

When clients express an interest in leaving a gift to charity, especially a health-related cause, he will encourage them to consider adding OMRF to their wills or trusts.

"Because of my education and experience in working in pharmacy, I understand the importance of research," he says. "Many of the breakthroughs in medical care would not have happened without organizations like OMRF. There are no easy answers, but research delivers a huge return on investment. Because OMRF is here in Oklahoma, it feels much more personal."

With three particularly painful losses in his life—siblings lost to breast cancer and Alzheimer's—Balentine doesn't just encourage others to give. He and his law firm, Evans & Davis, PLLC, also make frequent donations to OMRF in memory of a client, friend or colleague who has passed away.

Balentine made his first donation to OMRF in 1978. Since that time, he and the firm have continued that legacy, making more than 1,000 gifts to the foundation.

"Giving to OMRF just seems like a respectful way to remember our clients and families during a challenging time," he says. "It reminds all of us that something good can come from very painful and difficult times. Families seem to really appreciate gifts made in honor of their loved ones."

In his career, Balentine has created more than 3,000 estate plans for families and individuals, most in central Oklahoma. He continues to enjoy a deep passion for his work. "Over the years I have been privileged to work for some of the greatest people and have been allowed to share in protecting their loved ones," he says.

In the end, he says, the choices we make in the estate planning process speak volumes about who we are. "We feel like OMRF is a safe place and is worthy of consideration when clients think about including a charity as part of their legacy. The documents we help clients create will be read long after all of us are gone, and our families will be reminded of what was important to us."



Jerry Balentine has created more than 3,000 estate plans for Oklahomans

High Mileage

An OMRF researcher proves there's no need to hang up your running shoes as you age, and that makes one of her colleagues very happy.

Since he first laced up his sneakers for his high school track team in the 1970s, OMRF scientist Dr. Gary Gorbsky has relied on running to help him stay healthy and active. It's a habit that has given him time to be alone with his thoughts and work through the challenges he's found in life.

As a career scientist and runner, he's heard all the "conventional wisdom" that assumes running or jogging will eventually cause arthritis and wear down your knees. So he was especially pleased to hear the findings made about his favorite sport by his OMRF colleague Dr. Eliza Chakravarty.

Chakravarty was part of a team of researchers who studied thousands of runners over the course of more than 20 years. The scientists were investigating the long-term effects running has on the knees, and what they found surprised them. Not only was running not bad for the knees; it actually benefited them.

"I love those results," says Gorbsky, "because they support my basic contention that exercise is good for everything. Whatever health concern you might have, exercise improves your life."

Indeed, running has also been proven to lower risk of heart disease, stroke and even cancer. But those benefits have long been thought to come at the expense of your knees and the constant pounding they receive.

In Chakravarty's study, the control group was comprised of people with similar education levels, body mass indexes and other factors. The only significant difference was whether they were runners. "We didn't just study runners versus a bunch of overweight people who ate fast food and lounged around on the couch," she says.

Not only did the knees of the runners display less wear and tear than the non-runners, the runners reported less osteoarthritis and cartilage loss and were also less likely to have bone-on-

bone knee replacements. In addition, the researchers found all types of disability were greatly reduced in people who ran at any age.

"When you think about it, it makes sense, because the more you exercise, the more you strengthen the supporting ligaments and muscle structures that protect the knee," Chakravarty says. The reinforcement from strong quadriceps and other stabilizer muscles can better protect knees from damage. This becomes more important as a person ages, helping to counter natural muscle loss.

But, of course, that doesn't mean that running promises immunity from injury and disability.

"Any exercise can result in the occasional sore knee, tender Achilles or tight hamstring," says Gorbsky. "But I'm pleased to see such thorough research refuting the idea that running would lead to something more serious like arthritis."

Gorbsky himself stands as a testament to Chakravarty's research. Not only has he continued to run as he's gotten older, but he's now logging his highest mileage levels ever, with no knee issues. What's more, his hard work is paying off at the finish line.

In 2015, at the age of 60, he for the first time met the qualifying standard for the Boston Marathon. And in April 2016, he joined 30,000 other

qualifiers in the world's oldest and most prestigious annual marathon.

"I was happy to finish and satisfied with my performance," says Gorbsky, who covered the 26.2-mile course in 4 hours and 10 minutes. He suffered some cramping due to temperatures that reached 80 degrees, but he was pleased that he was able to keep running from beginning to end, even while climbing the notorious Heartbreak Hill section of the course.

These days, Gorbsky runs about 25 miles a week, and he's also cross-training with spin classes and exercise "boot camps." In April, he's planning on running the 2017 Oklahoma City Memorial Marathon, which he's completed several times in the past.

His advice to his fellow Baby Boomers is to keep active and to choose exercise that gets your heart rate up. "Running is my cup of tea, but do what works for you," he says.

After a recent run, Gorbsky went shopping while still wearing an OMRF workout tee. Spotting the shirt, another shopper asked him, "When are you scientists going to figure out the secret to eternal youth?"

"Oh, we already have," Gorbsky replied without hesitation.

The shopper visibly brightened. "Really?" he asked. "What is it?"

Gorbsky smiled. "Exercise."





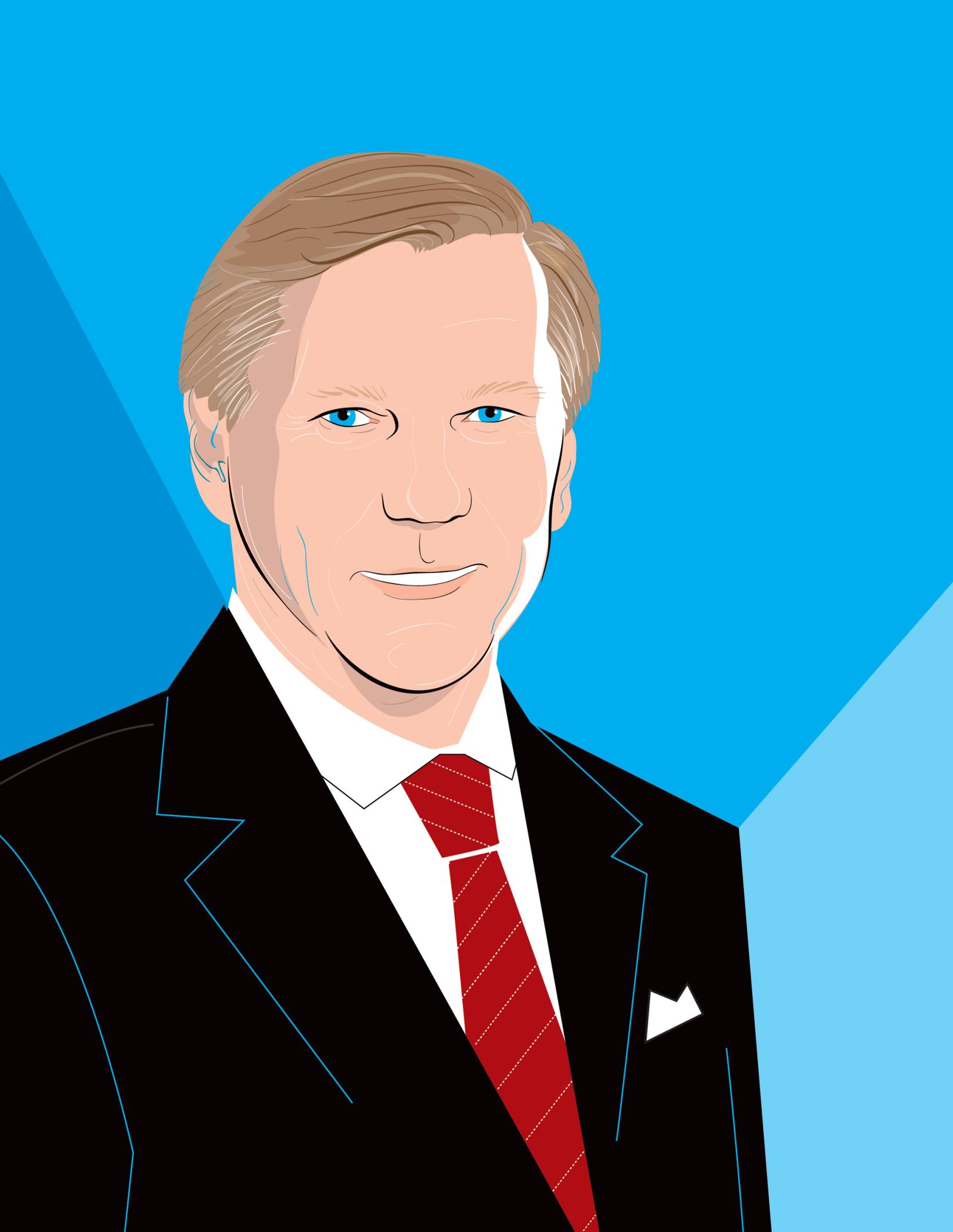
Dr. Fred Rhodes

SUPERINTENDENT, PUTNAM CITY SCHOOLS

Why do Putnam City Schools support cancer research at OMRF?

“Ask our students their favorite memories of school, and the Cancer Drive always tops the list. But it’s not about the games or the trophies. It’s because they’ve learned to be philanthropists at an early age. Almost every one of our students has been touched by cancer in some way, and the Cancer Drive instills in them a passion for giving. We’ll continue to support OMRF. It’s just a given. It’s part of Putnam City’s culture.”

Through events like bake sales, carnivals and a 5K run, the PC Cancer Drive has raised \$3.4 million for OMRF since 1975.



Under his leadership, OMRF has enjoyed a decade of scientific achievement and historic campus expansion. Still, if you ask

Dr. Stephen Prescott, he'll tell you he's just getting started.

THE RIGHT MAN FOR THE JOB

By Adam Cohen Illustration by Brian Taylor



For Dr. Stephen Prescott there was no aha! moment. No instant where everything crystallized and he just knew he had to take the helm of the Oklahoma Medical Research Foundation.

“If this were a movie,” he says, “there would have been some epiphany. I would have gazed across the campus at sunset and said, ‘This is exactly where I belong.’” He laughs. But the funny thing is, at this particular moment, he looks like he belongs precisely where he is.

He’s sitting at his desk, a few feet from a picture window that opens onto OMRF’s central courtyard, where the trees are beginning to take on autumnal hues of scarlet and gold. But Prescott doesn’t seem to notice. His eyes are fixed on the screen of his computer as he pecks away at the keyboard, trying to whittle away at scores of emails that accumulated during a morning of teaching what he calls “Executive Medical School.” It’s a program he designed and leads for OMRF’s National Advisory Council, a group of civic and business leaders he’s assembled from around the country who have volunteered to lend their talents to help OMRF.

Prescott’s tie is slightly askew, and he’s loosened his collar. But other than that, the physician and researcher appears no worse for the wear after having spent four hours leading a discussion about the microorganisms that line the human digestive tract.

“The class went great!” he says, turning away from his screen for a moment. “For our next session, we’re going to focus on diet and health. I think we can present some really interesting science.”

The color in his cheeks rises as he proceeds to tick off a string of projects that have been keeping him busy that week. There’s OMRF’s annual “241” (two events for one great cause) fundraiser that wrapped up the previous day, raising more than a half-million dollars for research at OMRF. He’s working with the neighboring VA Medical Center to help secure a research-grade MRI to study traumatic brain injury on the Oklahoma Health Center campus. And he’s been spearheading efforts to bring a half-dozen new principal scientists to OMRF from institutions around the country.

“On the heels of the financial crisis, we slowed our rate of recruitment,” he says. “In retrospect, I wish that maybe we hadn’t cut back quite so much. But at the time, we had to be cautious. We didn’t know what the future would bring.”

Ah, yes. That future thing. It can be tricky to predict.

In 2006, Prescott became OMRF’s ninth president. When he arrived, he said he “saw an organization that could make a difference in people’s lives, in human health.” But he needed time to develop his own vision for OMRF.

In the ensuing decade, he’s done just that. He’s led the largest campus expansion in OMRF’s history. He’s helped the foundation pivot from a laboratory-focused institute to one with a significant clinical presence. Two life-saving drugs born at OMRF have received FDA approval and are now being used to treat patients around the world, as is a test that helps physicians care for patients with rheumatoid arthritis. Prescott has also recruited more than two dozen new researchers and physicians, the so-called “next generation” of OMRF scientists. And he’s raised the funds to pay for it all.

Still, he says, “I’m most proud of the steady, substantial stream of scientific discovery by our researchers.” With that, he turns his attention back to his computer. He’s working on the early stages of coordinating the 2017 OMRF BioVenture Forum, a gathering of biotech and pharmaceutical executives to encourage scientific collaboration between industry and OMRF researchers. It’s yet another program he’s pioneered at OMRF—and another path he’s created to help transform the discoveries made in OMRF’s labs into treatments for patients everywhere.

“You know, it’s all still new and exciting to me,” he says. He shakes his head and grins in wonderment. “If you’d told me that 10 years ago, I never would’ve believed you.”

“It Felt Like Coming Home”

When OMRF embarked on the search for a new president in 2006, it cast a wide net. The opportunity to lead an institute with more than 40 laboratories and a history of stellar scientific achievement dating back more than a half-century was an attractive one, drawing interest from scores of prominent scientists from across the country.

“We had a lot of candidates who were excellent from the standpoint of their research backgrounds,” says OMRF board chair Len Cason, who led the search process. “But when I met Steve, he had that special quality. He was a leader.” Cason had interviewed other candidates, but he immediately knew that Prescott was the right person for the job. “I could tell he would be able to navigate all of those difficult situations you have when you’re CEO of an organization with such talented, intelligent, eccentric people.”

A well-respected physician-researcher, Prescott’s work led to the development of Cox-2 inhibitors, a family of drugs that includes Celebrex and is now used primarily to treat severe arthritis. Over time, his focus moved from the lab to senior scientific leadership at the University of Utah, where he helped to found and then served as the first executive director of the Huntsman Cancer Institute. “What makes me happiest is that we built a comprehensive cancer center that focused on the needs of patients,” he says.

With his work at Huntsman done—“If you’re looking for someone to serve as the caretaker of an outstanding institution, I’m not that guy”—Prescott began searching for a new opportunity. He was looking at positions in universities and biotechnology companies when he learned of the job at OMRF. He knew the foundation well, having served on its scientific advisory board and also as an external advisor on an OMRF grant for five years.

“Industry and academia are both extremely structured environments,” says Prescott. “What struck me about OMRF was the flexibility to pursue whatever I thought was the most interesting science.”

Prescott and Cason hit it off immediately. “The first time I met Steve, it felt like he was an old friend,” says Cason. In Prescott, Cason saw a results-oriented pragmatist focused on getting from point A to point B in the most efficient manner possible. “I thought we’d work well together, because we think a lot alike.” It didn’t hurt that when Cason checked with Dr. William Thurman, who’d served as OMRF’s president from 1979 to 1997, Prescott received a ringing endorsement.

The feeling was mutual. “The more people Steve met, the more convinced he became that OMRF was the right place,” says Prescott’s wife, Susan. High school sweethearts, the pair had grown up in College Station, Texas. “Steve interviewed in other places, but Oklahoma felt so familiar,” she says. “It felt like coming home.”

Reshaping OMRF

At OMRF, Prescott hit the ground running. Within a month of joining the foundation—“I hadn’t even finished unpacking my office”—he began laying the groundwork for a grant from the State of Oklahoma Opportunity Fund. Those funds would serve as the keystone for a project that would ultimately reshape OMRF.

For years, the size of OMRF’s scientific staff had been increasing. By the time Prescott arrived in Oklahoma City, the foundation had literally outgrown its space, some of which dated back to the foundation’s opening more than a half-century before.



“All of our labs were full, so we had to rent space at the Presbyterian Health Foundation Research Park,” says Prescott. When new researchers joined OMRF, they found themselves and their staffs on a sort of island, separated from the rest of the foundation by a mile or so. “Scientifically, it’s difficult to thrive when you’re isolated from your colleagues,” says Prescott. “And even though the space at the research park was top-notch, if you were an OMRF employee working there, you couldn’t help but feel disconnected from the rest of the foundation.”

Prescott proposed a bold plan: to construct a research tower at the heart of OMRF’s campus. The new facility would enable the foundation to bring all of its employees back to a single campus. It would also provide OMRF with future room for growth. It would allow for the addition of much-needed space for core facilities such as microscopy and imaging, as well as a biorepository for storing research samples collected from patients. Finally, it would give OMRF a chance to establish a robust clinical presence—a clinic that would allow physicians to treat patients and also conduct research.

With the support of OMRF’s board of directors, Prescott worked with Gov. Brad Henry and the Oklahoma legislature to secure funding for the project. Henry announced that the state would provide OMRF with a \$15 million grant to help support the project, which, he predicted, would “lay the foundation for even greater scientific achievements.” The tower, he said, represented “a bold investment that will pay major dividends for our state’s health, environment and economic development. It will, quite literally, transform the future of medical research in Oklahoma.”

With the state’s lead grant in place, Prescott set out to raise the remaining funds for the project. All told, the price tag for the expansion represented the largest single expenditure in OMRF history: \$100 million. The formidable fundraising initiative, which Prescott dubbed the Discoveries Campaign, grew even more difficult when the recession of 2008 and 2009 hit.

“As things got worse with the economy, we stepped back and reassessed,” says Prescott. “Nobody could see what was going to happen.” Still, when he brought up the prospect of shelving the expansion, OMRF’s board urged him to forge ahead. “They understood that this was mission-driven. And they saw a unique opportunity. So they asked, ‘Why wouldn’t we do this?’”

While raising the additional \$85 million needed to complete the project “proved more challenging than we’d first expected,” Prescott says, he and his OMRF fundraising team ultimately met their goal. “Even when oil prices hit rock bottom, our supporters kept giving. And the people who’d made pledges made good on them.”

OMRF broke ground on the research tower in 2009 and completed construction two years later. When it opened in 2011, the 186,000-square-foot facility added dozens of new laboratories, the Samuel Roberts Noble Cardiovascular Center, and the Multiple Sclerosis Center of Excellence, a research clinic that would treat thousands of Oklahoma patients suffering from MS.

The building also incorporated numerous energy-saving elements into its design, including 18 helix-shaped wind turbines atop its roof. The tower earned Leadership in Energy and Environmental Design (LEED) gold certification from the U.S. Green Building Council and was named a finalist for the Renewable Energy World North America Award. In an international competition involving more than 30 new buildings around the world, the tower won the S-Lab (short for “safe, successful, sustainable”) Award for best new research laboratory.

“We wanted to demonstrate that expansion could be bold and responsible at the same time,” says Prescott. “It’s a symbol of forward-looking excellence, of an organization that aspires to do great things. I think the building achieved that.”

With the state-of-the-art scientific facility completed, Prescott could turn his attention to a new task: recruiting the next generation of scientific talent to OMRF.



Recruiting the Next Generation

“When I came, it was obvious we had a significant number of senior scientists who would be reaching retirement age,” says Prescott. “They were institutional leaders, and we were going to have to replace them.”

Working with the heads of OMRF’s various research programs, Prescott and the foundation searched nationally and internationally, seeking out researchers in a wide variety of disciplines. Efforts initially focused on junior researchers, and within two years, OMRF had successfully recruited eight new principal scientists. They came from institutions such as Duke University, Yale University, the University of North Carolina and the National Institutes of Health, as well as from universities in Sweden and the United Kingdom. They immediately made an impact, securing a number of significant grants and making important findings in heart disease, lupus and cancer.

Those initial successes were followed with other new additions, including two key senior researchers: Drs. Holly Van Remmen and David Jones. Van Remmen joined OMRF from the University of Texas Health Science Center at San Antonio, where her work focused on age-related muscle loss and Parkinson’s disease. At OMRF, she teamed with researchers at the University of Oklahoma Health Sciences Center and the Veterans Affairs Medical Center to establish the state’s first Nathan Shock Center of Excellence in the Basic Biology of Aging. With this designation—one of only five nationwide—came major funding from the National Institutes of Health to help cultivate research projects focused on diseases of aging.

While Van Remmen now leads OMRF’s research efforts in age-related diseases, Jones came to Oklahoma from the University of Utah’s Huntsman Cancer Institute to spearhead a new initiative in cancer research at OMRF.

Jones specializes in the field of precision medicine, the tailoring of personalized courses of treatment for individual patients. He uses experimental “models” such as zebrafish to develop a more thorough

“With the research tower, we wanted to demonstrate that expansion could be bold and responsible at the same time.”

understanding of human biological processes, then works with clinicians to apply those lessons to help cancer patients in the clinic. In partnership with OU’s Peggy and Charles Stephenson Cancer Center, Jones has assembled a team of new scientists with similar research interests from the National Institutes of Health, the Huntsman Cancer Institute and the University of Illinois.

For each of these recruits—and every job candidate who comes to OMRF as a potential principal investigator to lead a laboratory at the foundation—Prescott interviewed them personally. It’s not something the president of a research institution typically does, but Prescott believes this sort of “high touch” approach is crucial to drawing talented scientists to Oklahoma and OMRF.

“It’s hard to attract the best scientists out there,” he says. “So you need to try to sell the city and the organization from day one.”

Those efforts have proven successful, as the majority of OMRF’s scientific faculty now consists of researchers who joined the foundation since 2006. Prescott, though, laments the fact that OMRF slowed recruiting efforts during the financial crisis and again when energy prices dropped. “It would have been nerve-racking, but in retrospect, I think we could have handled it financially.” As a result, the number of principal researchers at OMRF is not yet at the level he’d initially envisioned. “So, we’re picking up recruitment again.”

The process, he recognizes, is a dynamic one. “All good places are constantly adapting their science. You reconfigure. You pivot. You re-focus your recruiting efforts.” OMRF’s flexibility, he says, gives it an inherent advantage over larger, more bureaucratic institutions. “Science changes quickly. The most successful organizations do, too.”

Discoveries That Make a Difference

Since Prescott joined OMRF, two breakthrough medications born in the foundation’s labs have reached clinics and pharmacies. Soliris became the first drug to treat paroxysmal nocturnal hemoglobinuria, or PNH, a debilitating blood disorder. And Ceprotin, a treatment for children suffering from a life-threatening protein deficiency, received FDA approval in the U.S. Overseas, Ceprotin became the initial therapy made available under the European Union’s centralized marketing procedure.

“Our mission has always been broader than conducting medical research. From the earliest days, OMRF’s motto was ‘that more may live longer, healthier lives,’” says Prescott.

“That means transforming laboratory discoveries into ways to help patients.”

Under Prescott, that focus—which he calls “discoveries that make a difference”—has expanded to include more than drugs. In 2010, an OMRF-based test became available to help physicians manage treatment of patients with rheumatoid arthritis. Based on discoveries made by the foundation’s Arthritis and Clinical Immunology Research Program, Vectra DA, as the test is known, has now been used more than 200,000 times to monitor disease activity levels in patients and to help adjust their medication levels.

Prescott sees disease-monitoring tools like this, which rely on analyses of multiple biological markers gathered from patients through a biological sample, as an emerging facet of the treatment landscape. “It’s particularly true in autoimmune diseases, where you have illnesses that remit and flare and require regular adjustments in treatment.” Consequently, in a new partnership with a start-up company known as ProGentec, OMRF is now working to develop a similar biomarker-based test to guide rheumatologists in the treatment of lupus patients.

One of Prescott’s strategic emphases has been “to increase the impact of our work,” he says. “An effective way to do that is by forming partnerships.”

Those partnerships have included collaborations with the biotech and pharmaceutical industry, which bring drugs and tests based on OMRF discoveries to market. He’s also concentrated on strengthening ties with academic partners, especially with OU and Oklahoma State University. “In this era, no institution can attempt to do everything on its own,” Prescott says.

To that end, OMRF has inked a long-term collaboration agreement with OU’s Stephenson Cancer Center, with OMRF researchers providing research support and next-generation DNA sequencing to scientists at the Stephenson Center. Led by OMRF’s Dr. Judith James, OU secured a major grant to improve clinical care for underserved populations across the state. The project also includes researchers and physicians from OSU and more than a dozen other state and tribal organizations. “Particularly in a small state, it’s foolish to replicate infrastructure or put together duplicative research programs,” says Prescott. “Collectively, we’re so much better.”

Prescott’s vision for partnership extends well beyond Oklahoma. In addition to scores of joint projects between individual scientists at OMRF and U.S. institutes and universities, OMRF has forged a formal partnership with

a pair of institutions in India: the Rajiv Gandhi Centre for Biotechnology and Christian Medical College in Vellore.

“These institutions share research interests with us, and they have access to resources like unique clinical populations that can enhance the work,” says Prescott. “The world of research is evolving. We need to keep expanding our horizons.”

OMRF has also inaugurated a program to bring Polish graduate students to the foundation each year. It’s formed a partnership with the Oswaldo Cruz Institute in Rio de Janeiro to focus on infections and vaccinations. But some of those expanded horizons have not required OMRF to reach across the seas.

Connecting With Patients

When he made the decision to build the research tower, Prescott saw a chance for OMRF to return to its roots. But with a twist.

“Clinical research has always been part of our identity,” he says. When OMRF first opened, it ran a research hospital, where children suffering from intractable cancers could receive experimental treatments. Although that hospital closed in 1976, OMRF maintained a limited clinical presence, treating a small number of lupus and rheumatoid arthritis patients, who also frequently participated in clinical trials and research studies.

With the new facility, Prescott wanted to increase OMRF’s clinical footprint. But that expansion, he says, had to make sense for the foundation as a whole.

“I wanted to rebalance our research portfolio to add more of a clinical piece,” he says. “But we’re not in the patient care business, so whatever we did needed to have a connection back to the lab.”

He saw that connection in multiple sclerosis, a disease where OMRF had done a small amount of research. However, it’s a member of the family of autoimmune diseases, conditions in which the body mistakenly turns its immune system against itself. With strong research programs in other autoimmune diseases such as lupus, Sjögren’s syndrome and sarcoidosis, Prescott saw a natural bridge to MS.

With a clinic, OMRF could offer treatment to patients. Those patients, Prescott hoped, would volunteer to participate in research studies that would enable scientists to gain a better understanding of what underlies MS and its sister autoimmune conditions. “Our goal is to look at how autoimmune diseases get started. And how to use medications more effectively and sooner.”

He recruited Dr. Gabriel Pardo to serve as director of the Multiple Sclerosis Center of Excellence, which opened its doors in the spring of 2011. The Center is now treating more than 2,000 patients from Oklahoma and surrounding states and has a dozen clinical trials of experimental treatments for MS underway. Pardo and his colleagues are also working with Dr. Bob Axtell, an MS researcher who joined OMRF from

Stanford University in 2013, to use laboratory research to answer questions they encounter in the clinic.

“We’ve really made huge progress,” says Prescott. “Dr. Pardo and his team offer wonderful, supportive care for their patients.” And their work with Axtell—which Prescott would like to supplement with the addition of another clinician and another laboratory researcher—is helping to develop new strategies for disease prediction and management.

This approach to integrating laboratory and clinical research has twice helped OMRF win a designation from the National Institutes of Health as an Autoimmunity Center of Excellence, most recently in 2014. The award, which comes with significant federal funding for future research projects, places OMRF among fewer than a dozen institutions nationwide, an elite group that also includes Harvard and Stanford Universities.

“Sitting in an office or a laboratory, you don’t know what the most relevant, pressing clinical problems are. Interaction with clinicians is key,” says Prescott. “Having a major clinical presence onsite has really helped us inform our discovery research efforts.”

The Next Chapter

Late in the summer of 2016, OMRF celebrated the 70th birthday of its founding. Prescott wanted the affair to be low-key—tee shirts and cupcakes, not black ties and martinis. He gave a brief toast to the hundreds of employees

who’d gathered in the foyer of the research tower, then each received a free commemorative tee shirt. The shirts bore a picture of a birthday cake beneath the words “70 years of illuminating discoveries,” which had been suggested by a researcher. That slogan won out in a foundation-wide vote over several dozen other entries, including “Making a difference since Harry Truman was president.”

Prescott, who wore one of the tees, moved easily among the employees, chatting with administrative staffers

and researchers. He clearly enjoys these interactions, whether it’s in the OMRF fitness center (where he works out regularly) or serving pancakes as part of the foundation’s annual United Way fundraiser.

Outside of OMRF, the same sort of approachability has served him well. He’s taken on a prominent role in the Greater Oklahoma City Chamber of Commerce, where he’s helping to lead efforts to create an “Innovation District” in the area surrounding OMRF. He speaks frequently at Rotary Clubs and other civic organizations, and he’s also become something of a public resource for all things health-related in Oklahoma, with a pair of columns that run regularly in *The Oklahoman* as well as frequent appearances on local newscasts.

“Our reputation has always been good, but Steve has become the face of OMRF,” says Cason, the foundation’s board chair since 2001. “Everybody knows Steve, and everybody respects him.”

“The first time I met Steve, it felt like he was an old friend.”

Prescott feels the same way about the community. “People have been even more welcoming and friendly than we’d anticipated,” he says. “We’ve made more friends—and more good friends—here in 10 years than we did in 30 years in Salt Lake City.”

Dr. Paul Kincade, for one, is not surprised that Prescott has proven such a good fit for OMRF and Oklahoma. “Steve has a talent for understanding people, he loves interacting with just about any constituency, and he’s extremely good at it,” says Kincade, who joined OMRF’s scientific staff in 1982 and served as vice president of research under Prescott for a half-dozen years.

Prescott’s success at OMRF, says Kincade, comes from the decades he spent in the lab. “He understands scientists, and all of his efforts are devoted to supporting them. He provides them with resources, but then he gives them freedom and doesn’t micromanage them.” That environment, says Kincade, “encourages people to innovate.” And when they do, says Kincade, “Steve is very good at identifying excellence and rewarding it.”

As Prescott looks ahead, he has a good-sized to-do list. Atop it is to keep growing OMRF’s scientific staff. “I’d like to get a little bigger, but I’m not sure exactly how much is the ideal critical mass,” he says. Plus, there’s the continual need to replace scientists who retire or depart OMRF for other reasons. And for every new researcher who sets up a laboratory at the foundation, it requires at least \$1 million in “start-up” funding for supplies, equipment and salaries of lab personnel. “That means fundraising will always remain a priority,” he says.

Prescott wants OMRF to continue to build new networks with other institutions and industry sectors. “Is there something in imaging that we can do to connect with oil and gas or aerospace?” he muses. He also intends to take a closer look at how OMRF can begin to explore bioengineering.

“Steve has poised the institution for future growth,” says Dr. Thomas Tedder, a professor of immunology at Duke University School of Medicine. In 2016, he served as chair of OMRF’s scientific advisory board, a group of



researchers who come from across the country each year to perform an external review of OMRF’s research programs. “He’s really thought through the process. I think the future is very rosy for OMRF.”

Prescott is excited about what the coming years hold for the foundation—and for him. He recognizes that retirement looms somewhere out on the horizon, but he doesn’t see it coming “any time soon.” For his part, Cason doesn’t relish that prospect, whenever it may come.

“When Steve built the tower, he made a lot of capital improvements, he upgraded our level of science, and he did it all in a way that kept the team happy and together,” says Cason. “That will make life very hard on his successor. I mean, under those circumstances, how can you avoid failing other people’s expectations?”

At the foundation’s 70th birthday celebration, OMRF had hired a photographer to take a shot of the entire staff. On the second-floor balcony of the research tower, he set up lights and climbed a step ladder to enable him to take a shot of the foyer below, where 300 or so OMRF employees were now all clad in their matching blue tees.

The crowd gathered in a more or less organized fashion and peered up at the photographer. Prescott stood a dozen or so rows back, a few people removed from the table where employees had handed out the tee shirts.

The photographer called out for Prescott to move to the front. After all, this was his party, his foundation. But OMRF’s president didn’t move. Maybe he hadn’t heard above the crowd noise.

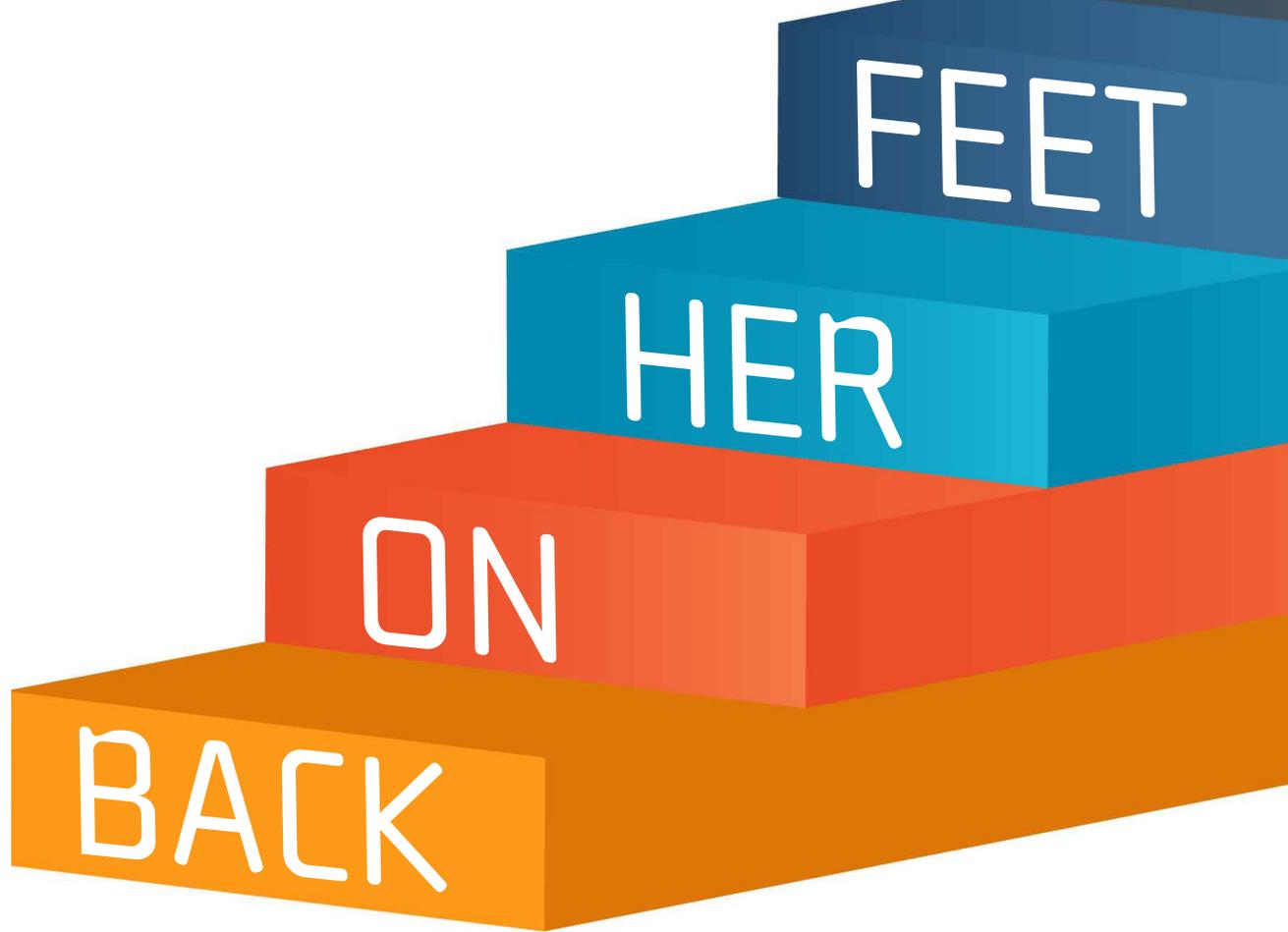
Again, the photographer shouted. But instead of moving, Prescott simply shook his head.

Sometimes, it seems, the best way to lead is not to move to the front. Just make a good plan and set things in motion. When it all comes together, you don’t need to call attention to yourself. You can just sit back and enjoy the moment.

“Everybody look at me and smile!” the photographer yelled over the din. Prescott looked up, surrounded by his employees in the tower he’d built, and grinned. 📷



By Shari Hawkins and Ryan Stewart
Photos by Brett Deering and Rachel Smith



An OMRF physician helped her get it back.

A mystery illness robbed a Tulsa teacher of life as she knew it.

The morning light cast a soft glow around the curtains covering the window. A food service worker pushed racks of trays past the door, leaving the smell of coffee and eggs in its wake. A moment later, a hand pushed open the door to Liz Haughey's room.

In the semi-darkness of her hospital room in Tulsa, Haughey lay still and watched a nurse walk to the dry-erase board across from her bed. With a quick scrub, the nurse wiped clean the details from the previous day. The whiteboard squeaked as she added new information.

The marker's acrid smell awakened something deep inside Haughey. The classroom. Her students. She missed each of them dearly.

Squinting, Haughey made out the date the nurse had scrawled on the board: July 28, 2011.

Four months. She'd been in this room, and mostly in this bed, for more than 100 days. Despite the passage of time—despite the doctors, the nurses, the physical therapy, the medications—she remained unable to stand without help. Still dependent on others to do almost everything for her. Still wondering what was happening to her body.

This is it, she thought. I'll never leave this place. I'm only 28, and my life is over.

Although Dr. Gabriel Pardo had not yet met Liz Haughey in July 2011, he would have understood her despair. He'd seen it countless times before.

After medical school, Pardo trained as an ophthalmologist and then completed a fellowship in neuro-ophthalmology, a field that merges the study of the eyes with the study of the brain. In his fellowship, Pardo regularly encountered patients suffering from complex, systemic diseases that avoided easy classification. The conditions proved difficult to diagnose and harder yet to treat.

Still, Pardo discovered he liked the challenge of decoding these devastating illnesses. As a neuro-ophthalmologist, he knew some eye problems seemed to emanate from faulty "wiring" in the nerves of the brain. It intrigued him enough that he completed a second residency in neurology to learn more about the nervous system and its role in disease.

He found satisfaction in helping patients understand what was happening to them and devising treatment plans that improved the quality of their lives. "Most patients just want an answer," Pardo says. "They want to identify the enemy, because you can't have a battle plan until you know what you're fighting."

In particular, Pardo found himself drawn to a disease in which the body's own immune system attacks the insulating



layer that protects nerves in the brain and spinal cord. That disease, multiple sclerosis, damages the nervous system's ability to transmit signals. Although the condition manifests itself differently in each individual patient, symptoms can include dizziness, vision impairment, balance problems, numbness, tremors, extreme fatigue, loss of coordination, and difficulty with speech, memory and concentration.

In most patients, MS starts out in a relapsing–remitting form, with the effects of the disease waxing and waning. Over time, MS progresses, resulting in increasing levels of disability.

MS impacts every aspect of a person's life, says Pardo, and that's what makes it such a complicated condition. "In addition, it's like an iceberg. As many as 15 silent events can occur for each identifiable symptom." Half of all MS patients will suffer from severe depression, he says. Others may have cognitive issues that affect their employment performance or even their ability to hold jobs. The disease also can impact family, social and interpersonal relationships.

"It's such a complex disease, and each patient presents a unique challenge to figure out not just what's happening to them but also to identify the right way to treat their condition," Pardo says. "So it's quite rewarding to help someone unravel this disease."

Pardo decided to focus his career on treating patients with MS. Over the next decade, he built a sizable practice in Oklahoma City, where he earned a reputation as a caring physician who left no stone unturned in an effort to achieve better outcomes for his patients.

Pardo participated in numerous clinical research studies. But he longed to take a deeper dive into MS research. In 2011, he got that chance.

Over a 30-year period, OMRF had built an international reputation as a research leader in diseases like lupus and other diseases of autoimmunity, conditions in which the immune system mistakenly turned its weapons on the body. With the construction of a new research tower, OMRF President Dr.

Stephen Prescott saw the chance to add another autoimmune disease to OMRF's research portfolio: MS.

"The logic of MS is that we had a lot of strength in autoimmune diseases, and Dr. Judith James"—who leads OMRF's autoimmune disease research efforts—"had already done work in MS," says Prescott. "But we didn't have anyone who was focused solely on MS."

When the opportunity to recruit Pardo arose, Prescott seized it. "Dr. Pardo had an excellent reputation as a clinical researcher. His work with patients would connect to the laboratory and help our researchers answer questions most relevant to the clinic."

With Pardo signed on as director, OMRF opened its Multiple Sclerosis Center of Excellence in the spring of 2011. The idea behind the Center, says Pardo, is first to be a "one-stop shop" for MS patients, offering clinical care, neurological and ophthalmology services, and physical therapy, as well as a dedicated infusion suite and wellness education. Those clinical services would also act as a catalyst for research, with patient volunteers donating biological samples and participating in studies designed to enable OMRF's laboratory scientists to delve deeper into the disease's mechanisms and causes.

"The vision is to create a feedback loop," says Pardo. "We want to have information flowing from the clinic to the lab and then back to the clinic." The ultimate goal, he says, is "to make new laboratory insights that can be transformed into therapeutic gains for patients."

The clinic began accepting new patients in May 2011. Word spread quickly, and by late summer, the Center was on its way to its goal of establishing a regular patient base of 2,000 to 3,000. Physicians throughout Oklahoma began referring their MS patients to OMRF, where they'd receive the specialized care they so desperately needed.

And that would be how Liz Haughey would come to know Gabriel Pardo.



“I feel so fortunate to have found Dr. Pardo and OMRF. They helped me get my life back.”

Haughey's legs provided her with the first clue that something was not right with her body. “I would sort of start to stumble along and couldn't stop until I ran into a wall,” she says. “Really, I couldn't control it at all. To watch me during those episodes, people probably would think I was drunk.”

About the same time, she began experiencing numbness in her left leg. As a social studies teacher at Tulsa's Booker T. Washington High School, she was on her feet all day, so she initially shrugged it off. But it didn't go away. Instead, the numbness spread up her leg into her left side, reaching her neck and face in a matter of weeks.

“I lost 20 pounds because I couldn't eat,” she says. “I tried to hide it from my family. It was so hard to eat with half my mouth numb, so I only ate lunch at school to keep up appearances. Very quickly, it started affecting my speech.” When she began having issues with her vision, she knew it was time to see a doctor.

Because of her drooping mouth, the doctor suspected Bell's palsy, a normally temporary condition where nerves in the face cause weakness and loss of facial movements. He told her to go home and get some rest, and her symptoms should improve. They didn't.

“When she laughed,” says Haughey's sister Abbey, “half her face didn't move. I knew then that something was very wrong. I was so scared for her.”

In a matter of weeks, Haughey needed a cane to walk to her classroom, and her head began to droop as the numbness spread across her neck. By early April, her condition forced her to take a leave of absence from teaching.

On Easter Sunday, Haughey was having great difficulty standing and walking, and her vision had grown blurred. When she tried to get up, she found she couldn't. She called out, and her brother carried her downstairs, where her family was preparing the holiday meal. But instead of eating, they all sat at the table together and cried.

The next day, Haughey's doctor checked her into the hospital, where she then spent four frustrating months undergoing a seemingly unending battery of tests and treatment regimens. Yet nothing seemed to work, and her doctors failed to arrive at a diagnosis. When they finally sent her to the Mayo Clinic in Rochester, Minn., an MRI revealed an “explosion” of lesions on her brain and brain stem and extending into her spinal cord. The resulting inflammation, Mayo physicians told her, was interfering with the connections between her brain and her body. They diagnosed her with multiple sclerosis.

“I had dreaded going to Mayo, because I was afraid to get more bad news,” says Haughey. “But I already felt like my life was over, so it was actually a relief to have a name for what was happening to me. But I really had no idea what MS was or what it meant for me.”

A family friend who also had MS knew that Haughey needed a specialist who could help her navigate this new world she'd entered. She suggested Pardo and helped arrange an appointment for her at OMRF.

When she first visited OMRF in August 2011, Haughey needed a wheelchair to get around. The numbness was still affecting her left side, and optic neuritis, inflammation of the nerve that connects the eyes to the brain, had robbed her of much of her eyesight.

Pardo prescribed an infusion of natalizumab, a drug engineered to target the attacking immune cells and inhibit their ability to migrate into the brain tissue. It's a powerful medicine that works well for many MS patients, particularly those with quick-spreading symptoms like Haughey's. But even the best treatments come with downsides.

“This medication alters the way the immune system works in the brain,” Pardo says. “You don't want immune cells attacking myelin”—an insulating layer that protects essential nerve fibers in the brain and spinal cord—“but you still need your immune system to function.” By tamping down the body's defenses, the drug can cause a range of side

effects, from headaches to an increased danger of a rare but potentially fatal brain infection.

Still, Pardo felt the risks were worth taking. “When Liz came to us, the aggressiveness of the disease was overwhelming her. It was important that we initiate equally aggressive treatment.”

At the hospital where Haughey stayed for months, doctors had told her parents that she likely would never walk again. But after Haughey began infusion treatments with Pardo in August 2011, strength and sensation began to return to her limbs. She gradually regained some of her coordination and balance.

In time, she found that she could stand again with the help of a walker. “It felt like Christmas morning,” she says.

Still, her family refused to let her rest on her laurels. If this much progress was possible, what else could she do?

On those occasions when Haughey felt down, “We decided not to let her wallow in sadness or self-pity,” says her sister, Abbey. “We didn’t give her any time to complain. We’d say, ‘Here, take five minutes for a little pity party, but that’s it. Let’s get going!’”

They insisted Haughey join them everywhere they went. Even when the family stayed home, they urged her to do laps in the driveway with her walker. In particular, says Haughey, “My dad really pushed me.”

Each day, Doug Haughey coaxed his daughter to walk a bit farther. When she finally built up the strength to try the half-mile loop around their neighborhood, the effort brought her to tears. By the end, she was taking baby steps, stumbling and leaning heavily on her walker. Yet after 90 minutes, she made it home under her own power.

“My dad was convinced that if my brain could remember how to do something, my body would remember, too. And he was right,” says Haughey. “It was so hard, but he never let me quit.”

Haughey stuck to her daily exercise routine, and her diligence continued to pay dividends. Soon, she was strong and mobile enough to visit her classroom at Booker T with the help of a walker. She could only observe as a substitute taught the lessons, but she now could imagine a light at the end of the tunnel.

When she came to OMRF for her next infusion in September, she asked Pardo about the possibility of returning to teaching. “He never sugar-coats anything with me,” Haughey says. “He looked at me and said, ‘If you think you can, you can.’ That was all I needed to hear.”

Even with her walker, it was a difficult trek from the parking lot to her classroom on the second floor at Booker T. By the time she made it to her class that first day, she was exhausted—but thrilled to be back.

“I could only stand for about one minute before my legs gave out,” she says. To remedy the problem, she arranged to have a recliner stationed at the front of the classroom. “My teacher education professors would probably tell you that no one teaches from an easy chair, but it saved me. It let me do the job I loved.”

With six U.S. History classes to teach each day, Haughey would need the help of her students to get through her

rigorous schedule. “I didn’t have a single discipline problem. Not one,” she says. “My students were my helpers when I needed them most.”

As the semester progressed, she set aside her walker for a cane. “Every day was better than the one before,” she says. She found she could stand and lecture for longer and longer periods of time. By the spring semester, she could sometimes make it through an entire presentation without relying on the cane.

She still avoided stairs, but her balance and stamina had improved remarkably. Her monthly infusion treatments at OMRF were paying off. “I felt alive again,” says Haughey, “and I knew I had a lot of living left to do.”

Happily, Haughey’s story is not unique. Yet until recently, a successful treatment path for patients with MS was almost unimaginable, says Pardo. “Treatment options were limited, and new medications were rare.”

In the past decade, though, the landscape has changed profoundly. In addition to natalizumab, which has worked so well for Haughey, the U.S. Food and Drug Administration has approved numerous other disease-modifying drugs. The medications reduce relapses and slow the progression of MS.

OMRF’s MS Center has participated in the research phases of several of those new medications.

“When I began my fellowship, we only had one specific drug on the market for MS. Now we have 14,” says Pardo. “I’ve never seen a revolution of this kind in any other neurological disease. We’ve made dramatic advances, and I expect that to continue in the coming years.”

According to Pardo, a big driver behind those advances has been centers like OMRF, where clinicians can collaborate with researchers who are helping to develop new approaches to therapy and disease management. At OMRF, Dr. Bob Axtell leads those discovery science efforts.

Axtell joined OMRF from Stanford University in 2013. His research focuses on how certain therapies behave differently in patients with MS than in people with other autoimmune diseases like lupus and rheumatoid arthritis. “MS seems to be a very different beast,” he says. “Drugs that have worked in lupus and rheumatoid arthritis actually make MS worse.”

Understanding why is important for the development of new MS medications. And finding new treatments is key, as the current medications all carry side effects—including some that can be life-threatening—and many don’t work for particular patients. Plus, the disease is progressive, and once it harms the central nervous system, no currently available treatments can reverse that damage.

For Haughey, that means her vision will never return to normal levels. Similarly, while she can now stand and walk, she lacks the stamina and mobility she possessed before MS struck her. And over time, despite the success of her current medication regimen, the disease may progress, further robbing her of vision, strength, balance and quality of life.

“We don’t know what tomorrow will bring for her,” says Pardo, “but she’s much improved and has much of her life back in place.” She continues to visit OMRF each month, where she receives an infusion of natalizumab and sees Pardo.



“My students were my helpers when I needed them most.”

“We’ll just have to be diligent in her care and monitor her for the foreseeable future,” he says.

Axtell is acutely aware of the struggles that patients like Haughey face. His lab sits one floor above the Multiple Sclerosis Center of Excellence, so he sees first-hand the toll that MS exacts on those it strikes.

“Bob encounters our patients on a daily basis,” says Pardo. “It provides him with a true reality check, because he gets a tangible picture of the desperate need for continued advances in treatment.”

The effect these interactions have on his work, says Axtell, is profound. “Without my involvement with Dr. Pardo and the clinic, my job would center on experiments in mice and writing papers about what might happen in humans. But here I have the ability to work with Dr. Pardo and his clinical team to access patient samples and ask clinically relevant questions about how the disease works. It’s a rare setup, and it’s a big deal.”

In her classroom, Haughey still keeps that easy chair next to her lectern for the days when fatigue sets in. She also positions fans around the room to keep her from overheating, another effect of her MS. Her vision is permanently impaired by the damage MS did before Pardo began treating her, so when she needs to read something on her computer, her nose nearly touches the monitor.

Haughey feels it’s important not to disguise her struggles from her students. “Kids can see right through you, so there’s no need to hide what’s happening,” she says.

She knows MS will be her constant companion. “I wish I could reach inside my head and take this disease away. But I can’t, so it leaves me with two choices: be angry and sad and wallow in self-pity, or accept it for what it is and, as Dr. Pardo says, live my life.”

Now, says Haughey, that decision is easy. “I choose life.”

While the disease often reminds her of its presence, she won’t let it define her. “MS is terrible, but I’ve found silver linings and blessings along the way,” she says. “No matter what I’ve faced or had to overcome, I’ll show the world a smile.”

One day this past November, two dozen or so teenagers scurried through the door and took their seats in Haughey’s AP U.S. History class at Booker T. Backpacks hit the floor, papers shuffled and conversations faded to whispers as the third-hour bell sounded and Haughey made her way to the lectern. Her cane was nowhere in sight.

“Remember, this is also for ACT prep,” Haughey told her students. “Make sure you take notes on everything we cover today. You’ll need to know it later.”

She flipped on a digital Smartboard that hung at the front of the room, and the first slide of her Powerpoint presentation lit the screen. Within moments, she was pacing back and forth on her orange polka-dotted rug, walking her students through the events leading up to the War of 1812. Her students were scribbling away, hanging on her every word.

It was an entirely unremarkable scene, one that plays out each day in countless classrooms around the world. But for Haughey, the fact that she was standing there at all was nothing short of remarkable. 

OKLAHOMA'S MEDICAL RESEARCH FOUNDATION CELEBRATES 70 YEARS OF LIFE-CHANGING DISCOVERIES

HAPPY BIRTHDAY, OMRF!

In 1946, DNA was just a collection of letters. Genes were nicknames for those with the given name Eugene. And the world's first biotech company wouldn't be born for another three decades.

But in Oklahoma, a group of physicians and business leaders saw the future potential biomedical research held. In August, OMRF marked the 70th anniversary of the moment when Oklahoma's Secretary of State granted the foundation's charter.

"Oklahoma is a young state, so we're often relatively late to the dance when it comes to historic developments," says OMRF President Stephen Prescott. "But we were really on the cutting-edge when it came to creating OMRF"

To fund construction of OMRF, Gov. Roy J. Turner led a drive that spanned all 77 of the state's counties. The state's physicians organized one fundraising campaign, and pharmacists, dentists and nurses followed suit with their own efforts. When Turner declared a statewide "Research Week," organizers held 137 meetings in 42 cities and towns during a seven-day period.

All told, 7,000 Oklahomans donated a total of \$2.25 million to build laboratories and a research hospital. And what began as a two-person operation in 1946 has grown into an internationally recognized research institute.

OMRF now employs more than 400 staff members who study cancer, heart disease, autoimmune disorders and diseases of aging. Their discoveries have yielded hundreds of patents and a pair of life-saving drugs now available in hospitals and clinics around the world.

OMRF's work continues to produce new breakthroughs. For instance, in OMRF's 70th birthday month alone, foundation scientists made

important new insights about blood circulation, autoimmune disease and the roots of vision loss in multiple sclerosis. They also secured new federal grants to support their investigation into asthma and diabetes.

An experimental drug for the treatment of a deadly form of brain cancer developed by OMRF scientists is currently undergoing clinical trials in patients at the University of Oklahoma's Stephenson Cancer Center. And in OMRF's next-generation DNA sequencing facility, not only do researchers study the unique genetic "instruction booklet" scientists have discovered we carry within us; they can now also determine the precise genetic makeup of any person—in fewer than two days.

"I don't think the founders and founding donors could have foreseen all the incredible science they'd make possible," says Dr. Paul Kincade, who served as OMRF's vice president of research from 2011 until 2016. "Still, I imagine they'd be pretty proud."

To commemorate the milestone anniversary, foundation employees enjoyed cupcakes and champagne in the atrium of the research tower, the newest addition to the foundation's Oklahoma City campus. The "low-key" birthday celebration, says Prescott, was in keeping with OMRF's long-time mission.

"The technology and knowledge base have changed drastically since 1946, but OMRF's goal has remained the same," says Prescott. "We want to help Oklahomans and people everywhere live longer, healthier lives."





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Spreading Cheer



In the 1950s, local teenagers in OMRF's Volunteer Junior Service Corps spent hours each week in the foundation's research hospital visiting with patients, baking birthday cakes and decorating their rooms for holidays.