HOW NEW BREAKTHROUGHS IN PRECISION MEDICINE CAN TRANSFORM THE QUALITY OF YOUR LIFE & THOSE YOU LOVE



1

NEW

TONY ROBBINS Peter Diamandis, M.D. & Robert Hariri, M.D., Ph.D.

BESTSELLER

YORK TIMES

WHAT THE WORLD'S GREATEST LEADERS IN SCIENCE & MEDICINE ARE SAYING ABOUT LIFE FORCE...

"*Life Force* is a tour de force. Tony Robbins and Peter Diamandis beautifully explain the latest scientific, medical, and lifestyle advances now available to maximize health- and lifespan. A must-read for anyone who desires to function optimally now and protect themselves from diseases in the future."

> —David Sinclair, PhD, professor of genetics at Harvard Medical School; codirector of the Paul F. Glenn Center for Biology of Aging Research at Harvard; author of the New York Times bestseller Lifespan: Why We Age—and Why We Don't Have To

"We are in the midst of a biotech revolution that has the potential to cure most diseases—adding decades to your healthspan. Tony Robbins and Peter Diamandis have authored a powerful and friendly road map for anyone to maximize their health and vitality. *Life Force* does a marvelous job of making technologies like CRISPR, gene therapy, and stem cells understandable, in a way that gives the reader a hopeful and compelling vision of the future."

> —George Church, PhD, professor of genetics at Harvard Medical School; professor of health sciences & technology at Harvard and MIT, and a founding member of the Wyss Institute for Biologically Inspired Engineering

"You will not regret buying this book. It is full of the latest, but importantly, scientifically grounded, facts aimed at extending one's lifespan and healthspan. Tony & Peter serve up a whole-body finger-buffet of essential information, written with a beautiful narrative arc. Perhaps most important, this isn't just a book about "here's what you should do," but in addition "how to do it." The

book is actionable, practical. Bottom line: you will be changed by this book, and so, so much for the better."

—Matthew Walker, PhD, professor of neuroscience at the University of California, Berkeley; sleep scientist at Google; author, *Why We Sleep: Unlocking the Power of Sleep and Dreams*

"*Life Force* is a visionary and extraordinary book—filled with the latest sciencebased information on health and healing that can help transform both the quality and quantity of your life. Highly recommended!"

> —Dr. Dean Ornish, president and founder of the Preventive Medicine Research Institute; clinical professor, University of California, San Francisco School of Medicine; author, *Reversing Heart Disease*, and *UnDo It!*

"Tony Robbins, long the master of helping others generate the right mindset for success, turns his attention in *Life Force* to providing us with useful lessons on whole-body health and a roadmap for how advances in precision medicine can help us improve and extend our wellness and overall healthspans."

> —Dr. Michael Roizen, chief wellness officer emeritus at Cleveland Clinic for Functional Wellness, award-winning author of five *New York Times* bestsellers

"*Life Force* will help you find answers. It covers the most important innovators, inventions, and technologies that are transforming health and medicine today."

—Ray Kurzweil, famed inventor and futurist with a 30-year track record of accurate predictions, awarded the National Medal of Technology by President Bill Clinton, and the man *Inc* magazine calls the "rightful heir to Thomas Edison"

"This remarkable biopsy of modern medicine's marvels takes us on a futuristic journey of hope and healing that is already at our fingertips and will have a seismic impact on readers."

—Mehmet Oz, MD, attending surgeon, New York Presbyterian & Columbia University

"Tony Robbins gives you access to information that's not readily available. Story after story of medical breakthroughs will inspire you and provide you with effective solutions for greater health, wellness, and quality of life."

> —Dr. Mark Hyman, head of strategy & innovation, Cleveland Clinic Center for Functional Medicine, 14-time bestselling author, internationally respected physician, researcher, educator, and activist

"You will find a treasure trove of the long-standing and emerging secrets to extending your healthspan and your lifespan in *Life Force*. In one place, Tony Robbins and Peter Diamandis have complied the insights from over 100 leading experts in the fields of health, medicine, and technology that readers can use to make better decisions to fuel a better heart, mind, and overall quality of life."

—Eric Verdin, MD, president and CEO, the Buck Institute; assoc. professor, University of California, San Francisco School of Medicine; fellow of the American Association for the Advancement of Science

"*Life Force* showcases the coming breakthroughs in treating and preventing dementia, cancer, and cardiovascular disease. This powerful book delivers actionable strategies to keep us healthier, longer. Tony and Peter make the promise of the precision medicine revolution understandable through compelling stories. This is a must-read for anyone who desires the healthiest possible future for themselves and the world!"

—Rudy Tanzi, PhD, bestselling author, *The Healing Self*; professor of neurology, Harvard University; co-director of the McCance Center for Brain Health, Mass. General Hospital

WHAT THE WORLD'S GREATEST ATHLETES ARE SAYING ABOUT TONY ROBBINS & LIFE FORCE

"In his new book Tony Robbins brings you the most important resources that can help anyone sustain peak performance, and lead a healthy and more vital life."

> —Cristiano Ronaldo, top goal scorer of all time, 5-time Ballon d'Or winner, 33 career trophies, 7 league titles, and 5 UEFA Championship League titles

"In *Life Force* you'll find the latest breakthroughs and therapies available to help you heal and strengthen your body—the same nonsurgical solutions that helped me go from not being able to stand for longer than 10 minutes, to playing golf and hitting the tennis ball again without pain. They will dramatically enhance your life!"

> —Jack Nicklaus, greatest golfer of all time with 120 professional tournament victories worldwide, and winner of 18 professional major championship titles

"Tony Robbins helped me discover what I am really made of. With Tony's help, I've set new standards for myself, and I've taken my tennis game—and my life to a whole new level!"

—Serena Williams, 23-time grand slam champion

WHAT THE WORLD'S GREATEST LEADERS ARE SAYING ABOUT TONY ROBBINS & LIFE FORCE

"When Tony Robbins focuses on a subject to help you, he speaks with the luminaries in the field to get the most important concepts, synthesizes them brilliantly, and lays them out in an easy-to-understand and entertaining way so it is a beautifully packed gift. *Life Force* is Tony Robbins at his best, dealing with the most important life question—how do we make our lives last longer and be of better quality? For those looking for answers to this question, this is a mustread. In this landmark book, Tony shows us the amazing scientific breakthroughs that are now being made and how you can take advantage of them to improve the quality and length of your life."

> —Ray Dalio, founder & co-chief investment officer of Bridgewater Associates, the largest hedge fund in the world, #1 *New York Times b*estselling author of *Principles*

"Tony Robbins has been an enormous source of strength and insight for me both personally and professionally."

> —Peter Guber, chairman & CEO of Mandalay Entertainment, owner of the LA Dodgers and Golden State Warriors

"He has a great gift. He has the gift to inspire."

-Bill Clinton, former president of the United States

"Tony Robbins is a genius.... His ability to strategically guide people through any challenge is unparalleled."

-Steve Wynn, CEO and founder of Wynn Resorts

"Tony Robbins' strategies and tools have been at the core of our culture from the beginning. He has been one of the critical keys to Salesforce.com's leadership and growth into an over \$25 billion company. Without Tony and his teachings, Salesforce.com would not exist today."

-Marc Benioff, founder, chairman, and CEO of Salesforce.com

"What Tony really gave me, a kid sitting on Venice Beach selling T-shirts, was to take risks, take action, and really become something. I'm telling you as someone who has lived with these strategies for 25 years: I'll come back for more again, and again, and again."

-Mark Burnett, five-time Emmy Award-winning television producer of *Survivor, Shark Tank*, and *The Voice*

"Tony's power is superhuman.... He is a catalyst for getting people to change. I came away with: It's not about motivation as much as it is allowing people to tap into what's already there."

-Oprah Winfrey, Emmy Award-winning media magnate

WHAT THE WORLD'S GREATEST FINANCIAL MINDS ARE SAYING ABOUT TONY ROBBINS

"Robbins is the best economic moderator that I've ever worked with. His mission to bring insights from the world's greatest financial minds to the average investor is truly inspiring."

—Alan Greenspan, former Federal Reserve chairman under four sitting presidents

"Tony came to my office for a 45-minute interview that ended up lasting four hours. It was one of the most thought-provoking interviews of my life. His energy and passion are contagious and energizing."

—The late John C. Bogle, founder, the Vanguard Group, which has more than \$3 trillion in assets under management

"Tony Robbins is a human locksmith—using his unique insights into human nature, he knows how to open your mind to larger possibilities."

> —Paul Tudor Jones II, founder, Tudor Investment Corporation, and one of the top ten traders in history

WHAT WORLD'S GREATEST ENTERTAINERS ARE SAYING ABOUT TONY ROBBINS

"No matter who you are, no matter how successful, no matter how happy, Tony has something to offer you."

—Hugh Jackman, Emmy– and Tony Award–winning actor, producer

"Tony Robbins is a genius, and only keeps on getting better. He inspires Rocky to keep punching."

-Sylvester Stallone

"I was afraid that my success would take something away from my family. Tony was able to turn it around and show me that I've helped millions of people. Probably the most intense feelings I've ever had."

> —Melissa Etheridge, two-time Grammy Award–winning singer and songwriter

"If you want to change your state, if you want to change your results, this is where you do it; Tony is the man."

> —Usher, Grammy Award–winning singer, songwriter, entrepreneur

"What does this man have that everyone wants? He is a 6'7" phenomenon!"

—Diane Sawyer, former *ABC World News* and *Good Morning America* anchor

"Tony Robbins knows the rhythm of success. He is an incredible source of inspiration, and his methods have improved the quality of my life. I only work with the best, and Tony is the best."

-Quincy Jones, Grammy Award-winning musician, producer

"Working with Tony Robbins, I felt unstoppable. From that moment on, there was zero doubt in my mind about what I wanted and how I was going to achieve

it. I was so clear about what I wanted that I made it happen: I became world champion."

—Derek Hough, dancer, choreographer, and 5-time winner of ABC's *Dancing with the Star*s

"Tony Robbins provides an amazing vehicle for looking at your life, mapping out a mission, and determining what's holding you back and what you need to move forward."

—Donna Karan, legendary fashion designer, founder of DKNY

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LIFE FORCE

HOW NEW BREAKTHROUGHS IN PRECISION MEDICINE CAN TRANSFORM THE QUALITY OF YOUR LIFE & THOSE YOU LOVE

TONY ROBBINS

AND PETER H. DIAMANDIS, MD with ROBERT HARIRI, MD / PhD

SIMON & SCHUSTER New York London toronto sydney new delhi This book is dedicated to those souls who will never settle for anything less than all they can be, do, share, and give in their lifetime. Most important, to God's greatest gift in my life, my wife of twenty-two years, my Sage, my children, grandchildren, and my extended chosen family, I am grateful beyond words to each of you.

-Tony Robbins

To my father, **Harry P. Diamandis, MD**, a dear and glorious physician who made it to age to 89.

And to my incredible mom, **Tula Diamandis**, who at age 86 is going strong! May she make it to her 100th!

-Peter H. Diamandis

I'd like to dedicate my contributions to this book to my family—Alex, Jack, Haley, and Maggie—with the hope that our ongoing work will add healthy years, even decades, to the lives of those who make our efforts meaningful.

—Dr. Robert Hariri

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LIFE FORCE ADVISORY BOARD

We would like to thank the 11 members of our advisory board for their support on this book. They are all leaders in their field, and we are grateful for all of their collaboration.

- Dean Ornish, MD—president and founder of the Preventive Medicine Research Institute; Clinical Professor, University of California, San Francisco, School of Medicine; author, *Reversing Heart Disease* and *UnDo It!*
- David Sinclair, PhD—professor of genetics at Harvard Medical School; codirector of the Paul F. Glenn Center for Biology of Aging Research at Harvard; author of the New York Times bestseller *Lifespan: Why We Age—and Why We Don't Have To*
- George Church, PhD—professor of genetics at Harvard Medical School; professor of health sciences and technology at Harvard and MIT; and a founding member of the Wyss Institute for Biologically Inspired Engineering
- Deepak Srivastava, MD—president, Gladstone Institutes; professor, Department of Pediatrics and Department of Biochemistry and Biophysics, University of California, San Francisco, School of Medicine
- Eric Verdin, MD—president and CEO, the Buck Institute; associate professor, University of California, San Francisco, School of Medicine; fellow of the American Association for the Advancement of Science
- Jennifer Garrison, PhD—assistant professor at the Buck Institute and founder of the Global Consortium for Reproductive Longevity and Equality; assistant professor, cellular molecular pharmacology, University of California, San Francisco School of Medicine

- Carolyn DeLucia, MD, FACOG—practicing OB/GYN for more than 30 years and alternative therapy expert. Pioneer at the leading edge of noninvasive sexual wellness treatments
- **Rudy Tanzi, PhD**—professor of neurology, Harvard University; director of the Genetics and Aging Research Unit at Massachusetts General Hospital; vice chair of Neurology and codirector of the McCance Center for Brain Health
- **Rhonda Patrick, PhD**—published scientist and educator, creator of FoundMyFitness. Areas of expertise include research on aging (conducted at the Salk Institute), the role of genetics and epigenetics in health status, benefits of exposing the body to hormetic stressors, and the importance of mindfulness, stress reduction, and sleep.
- Hector Lopez, MD—cofounder of JUVN3 Holdings, LLC; founding partner and chief medical Officer, Supplement Safety Solutions, LLC, and Center for Applied Health Sciences, LLC; CEO of Ortho-Nutra and NutriMed Solutions
- Matthew Walker, PhD—professor of neuroscience at the University of California, Berkeley; sleep scientist at Google; author, *Why We Sleep:* Unlocking the Power of Sleep and Dreams

PREFACE

Congratulations on picking up this book! We're thrilled to take you on a journey of scientific breakthroughs, many of which you can apply today to immediately improve the quality and perhaps the quantity of your life. Here's just a taste of what you'll be learning in the pages ahead:

HOW TO GAIN PURE ENERGY, STRENGTH, AND MAXIMUM PERFORMANCE

- Learn how to immediately boost your energy by tapping into the power of a natural compound in your body that drives energy at a cellular level.
- Discover the four vitality ingredients that a world-renowned genetics professor has used to reverse his biological age by 20 years.
- Increase your strength and muscle mass, boost your metabolism, and increase your bone density up to 14 percent with a scientifically proven 10-minute workout (once a week!).
- Learn the third pillar of health—one of the simplest things you can do to increase your daily focus, boost your mood, and experience greater vitality without caffeine or other stimulants.
- Prime your body for peak performance by using the latest wearables and devices that give you 24/7 personalized fitness, sleep, and recovery data.

HOW TO ACCELERATE HEALING, REGENERATION, AND LONGEVITY (WITHOUT SURGERY)

- How stem cells have helped people regain the use of their arms and legs after strokes or severed spinal cords, recover from injuries like torn ligaments, and driven children with leukemia into remission.
- A novel gene therapy that's been shown to restore sight with just two injections.
- A new injection that's saving hundreds of lives by helping those suffering from anxiety and/or PTSD.
- Three new powerful and effective scientific breakthroughs for eliminating back pain.
- An incision-less brain surgery that uses ultrasound to significantly relieve Parkinson's symptoms in minutes, and is now being tested in its use to block the addictive pattern in the brain.
- A breakthrough molecule that could erase osteoarthritis by growing new, pristine cartilage within 12 months, with just a single injection.
- Exponential technologies such as artificial intelligence, CRISPR, and gene therapy are being used to unravel the mystery of aging, how to slow it, stop it, and perhaps even reverse aging.

HEALTHY WEIGHT LOSS AND INNOVATIVE ANTI-AGING REMEDIES

- Two FDA-approved solutions that help curb your appetite, one of which has delivered an average weight loss of 22 pounds.
- Accessible and affordable hair treatments that can increase hair growth, luster, and volume up to 60 percent without harsh chemicals or uncomfortable side effects.
- New anti-aging remedies customized specifically for your skin by taking into account your DNA, lifestyle, and environmental factors so you can have glowing skin regardless of age.
- A way to blast fat for good with a noninvasive technology that helps you lose fat and tightens your skin (without surgery or scarring).
- The building block your body naturally produces that can give you Botox without needles, plus a new head of hair.

NEW WAYS OF TACKLING THE TOP KILLERS

- **Cancer:** How to win the war on cancer with the most promising alternatives to chemotherapy and radiation and a revolutionary blood test that may detect more than 50 types of cancer before symptoms surface.
- Heart Disease: A new FDA-cleared artificial intelligence test that can predict heart disease five to ten years in advance and provide a road map to help prevent it.
- **Diabetes:** The pennies-per-dose medication that safely treats and helps prevent type 2 diabetes and may protect you from cancer, heart disease, and Alzheimer's.
- Alzheimer's: A company that's applying CRISPR gene-editing technology to relieve Alzheimer's symptoms such as anxiety and depression.
- **Stroke:** How virtual reality headsets, high-tech sensors, and video games improve stroke survivors' dexterity and mobility.

... and much more.

INTRODUCTION BY RAY KURZWEIL

Ray Kurzweil is one of the world's leading inventors, thinkers, and futurists, with a thirty-year track record of accurate predictions. Kurzweil was selected as one of the top entrepreneurs by Inc. magazine, which described him as the "rightful heir to Thomas Edison." He was awarded the National Medal of Technology and Innovation, for pioneering and innovative achievements in computer science such as voice recognition, which have overcome many barriers and enriched the lives of disabled persons and all Americans.

I have a very short list of people whom I will almost always say yes to when asked a request. Tony Robbins and Peter Diamandis are at the top of this list. So, when they asked me to write this foreword, I didn't hesitate. Tony and Peter share my belief that the power of human ideas can change the world, including how long we live. No matter what quandaries we face—business problems, health issues, relationship difficulties, the great social and cultural challenges of our time—there exists an idea that will enable us to prevail. We can and must find that idea. And when we find it, we need to implement it. *Life Force* will help you find those answers. It covers the most important innovators, inventions, and technologies that are transforming health and medicine today. We are on the cusp of profound medical advancements as Artificial Intelligence begins to unlock the mysteries of our bodies and brains. Yet many conventional healthcare practitioners are still caught up in the old paradigm and don't practice medicine as an information technology. This means that each of us has to take control of our own healthcare. I've had some experience with that. Let me explain.

My father had a heart attack when I was 15 and died of heart disease when I was 22 (he was 58) in 1970. I had confidence in my ability to solve problems that came my way, and I realized that I probably inherited my father's genes for heart disease, so I put this health challenge on my long-term to-do list. In 1983, when I was 35, I was diagnosed with type 2 diabetes. The conventional treatment made it worse (causing me to gain weight, which exacerbated the diabetes), so I decided the time had come to bring these personal health issues to the top of my to-do list. I immersed myself in the health and medical literature, came up with my own approach involving nutrition, lifestyle, and supplements and ultimately eliminated any indication of my diabetes by 1988. I wrote a bestselling health book about the experience, *The 10% Solution for a Health Life*, and have since written two more award-winning health books, *Fantastic Voyage* (2004) and *TRANSCEND: Nine Steps to Living Well Forever* (2009).

As I was going through this personal health revelation, I was also busy working on two inventions: the first music keyboard capable of accurately reproducing the sounds of a grand piano and other orchestral instruments and the first commercially marketed large-vocabulary speech recognition system. Today a descendant of that technology is Apple's voice-recognizing Siri. As an inventor, I realized that the key to success was timing. Most inventions and inventors fail, not because they are unable to get their gadgets to work, but because their timing is wrong. So, in the early 1980s I became an ardent student of technology trends, tracking the capacity and price performance of computing, and discovered that technology was advancing exponentially. This was a radical idea at the time because it turned our intuition—to think linearly —on its head.

It was around 1995 that I began to see that the exponential growth of technology applied to the Genome Project, which had begun in 1990. Seven and a half years into the project, one percent of the Genome had been collected, which caused early critics to say that it was going to take seven hundred years to finish. My response was that the project was right on schedule and that one percent is only seven doublings away from 100 percent. And indeed, the project continued to double each year and was done seven years later. The same rate of exponential progress has continued since the Genome Project ended. **Decoding that first genome cost more than \$2.7 billion dollars. Today it costs less than \$600.** And every other aspect of what we call biotechnology—understanding the genome, modeling it, simulating it, and, most important, reprograming it, is progressing exponentially.

We now have the ability to prevent, treat, and (soon) cure diseases with biotechnology, guided by artificial intelligence. We are beginning to reprogram our biology in the same way that we reprogram our computers. Take for example the "turbocharged" flu vaccine created by researchers at Flinders University in Australia. They used a biology simulator to create trillions of chemical compounds and then used another simulator to see which compounds would be useful as immune-boosting drugs against the disease. They now have an optimal flu vaccine that is being tested on humans.

The trickle of current clinical biotechnology applications will become a flood by the end of the 2020s. In the past three years we've reached a tipping point in computational power for artificial intelligence to quickly simulate, test, and solve biochemical problems. The amount of computation devoted to training the best computer models since 2012 has doubled every three and a half months. That's a 300,000-fold increase in the last nine years. This has opened the door for AI to find medical solutions in a fraction of the time that it takes humans. Eventually, our trust in these AI driven simulations will grow and we will accept their results as sufficient without spending months on human trials. Soon we will be able to simulate trillions of possible solutions to every health problem and fully test them in hours or days.

This will bring us to the 2030s, when medical nanobots—blood cell– sized computers—will go into our bodies to combat disease from within our nervous system and travel into our brains through the capillaries where they will provide wireless communication between our neocortex and the cloud. Ideas and innovations will no longer be constrained by the size of our skulls. They will be free to grow exponentially in the cloud, expanding our intelligence a billionfold. But I am getting ahead of myself.

My point is that we must do everything we can today to be as healthy as possible, for as long as possible, in order to benefit from the fast**approaching merger of AI and medicine.** Now is the time to make maximal use of the latest medical knowledge to help eliminate our chance of disease and to drastically slow down the aging process.

The tools to enhance and extend our lives are already in our hands. We just need the courage to question outdated assumptions that limit our ability to use them. Tony and Peter live by this philosophy and have written this book so that you can too.

SECTION 1

THE LIFE FORCE REVOLUTION

Join me on a journey to answer some of life's most important questions and become the CEO of your own health. Learn how stem cells are driving the regenerative medicine revolution, discover the latest in preventative, predictive, personalized diagnostics tools that could literally save your life or that of someone you love, and discover the four vitality ingredients that Harvard Geneticist and longevity expert David Sinclair, PhD, has used to reverse his biological age by 20 years!

CHAPTER 1

LIFE FORCE: OUR GREATEST GIFT

Connect to the Supreme and Vital Power of Your Life Force

"A healthy person has a thousand wishes, but a sick person has only one." —INDIAN PROVERB

I'm walking through the open air of St. Peter's Square, past the immense dome of the Vatican, awed by the grandeur and beauty of this magnificent setting. As I walk up the white marble steps to the Vatican Hall, I see all heads suddenly turning. I follow their gaze, and I notice an older man with a benevolent smile and humble expression walking toward me. I look directly into his eyes as we reach out to shake hands... and then I realize it's the Holy Father, the Pope.

I've traveled to the Vatican for a landmark meeting with some of the greatest scientific minds in the world. They've flocked here for a conference hosted by Pope Francis himself. I've been invited to deliver the final speech to a roomful of pioneers in regenerative medicine—one of the great honors of my life.

Over three spellbinding days, we listen to a stream of brilliant scientists, doctors, and healthcare entrepreneurs. They speak with urgency and passion about the solutions they're developing to combat deadly diseases and devastating medical disorders. They share mind-blowing revelations about new methods to restore the body at the cellular and molecular levels—therapies that can reinvigorate muscles and joints and blood vessels, revive damaged organs, conquer illnesses that previously seemed incurable. They take us on deep dives into stem cell treatments, gene therapy, and other life-changing innovations that amplify the body's **natural capacity to repair and renew itself.** As you'll soon discover, many of these advances are so stunning that even a nonreligious person would describe them as miraculous!

As spiritual leader to 1.3 billion Catholics around the world, Pope Francis wants to nurture these scientific miracles for the good of all humanity. In his welcoming speech, he tells us how happy he is to have brought us together "from different cultures, societies, and religions" to serve our shared mission of helping "those who suffer" and exchanging knowledge "for the benefit of all."

The fact that the Pope himself is spearheading this historic event tells us just how far regenerative medicine has advanced. It speaks to the enormous potential of these trailblazing approaches to eliminating suffering, restoring our health, and enhancing our well-being.

In Rome we had a firsthand, front-row seat to see the impact of these unbelievable breakthroughs. We met a 15-year-old who'd been given less than one chance in three of surviving leukemia—and was now, more than ten years later, in perfect health, thanks to a novel stem cell treatment. We heard from people with advanced cancer who'd exhausted their options with chemo and radiation and were sent home to die. But they didn't give up. They tried some of the amazing new treatments you'll be reading about here—and two years later they weren't just surviving, but thriving!

I've written this book to help you understand what all this excitement is about. I want to empower you to take full advantage of this revolution in diagnostics, biotechnology, and regenerative medicine. It has already changed my life in ways I could never have imagined. It's transforming healthcare from top to bottom. It promises to expand our strength and vitality and potentially how long we can live. I want you to be among the first to benefit from these scientific discoveries, because I know from my own experience how dramatically they can improve the quality of *your* life. In fact, the practical knowledge that I'm about to share with you in these pages might actually *save* your life—or the life of someone you love.

The aim of this book is to give you the latest information on the astounding tools and therapies that are available RIGHT NOW, and others that could soon be approved by the U.S. Food and Drug Administration (FDA). These

innovations will enable you to solve many of the most common health challenges before they get out of hand. Imagine being able to find cancer at stage zero, when it's supremely treatable and ultimately curable. Wouldn't it be invaluable to understand your genetic risk factors, and some of the tools available that could lower or stop those risks from becoming reality? Think of the power of being able to change your lifestyle to avoid degenerative problems like heart disease and diabetes. Did you know that one company is in Phase 3 trials with a tool that could heal arthritis to help you regrow fresh cartilage like a teenager? Many of these developments are so astonishing that they sound like they'll be emerging in twenty or thirty years. In fact, <u>many of these are happening right now!</u>

The speed of the biotech and healthcare revolution is geometrically *accelerating*, for two reasons. The first is a massive inflow of capital. While COVID-19 brought devastation to so many, it also served as a massive stimulus for investment. Despite the pandemic, more venture capital was invested in 2020 —including a record \$80 billion in healthcare startups alone—than at any other time in history. There are more dollars than ever before to drive more and more audacious medical and biotech innovations from research into the market.

The second reason is that biology is now an information technology, which means that the field of medicine is getting both better and cheaper at warp speed.

Thanks to technology, every phase of medical treatment is being reimagined. On the front end, sensors and networks are upending medical diagnostics. In the middle, robotics and 3D printing are reinventing traditional medical procedures. On the back end, artificial intelligence (AI), genomics, cellular medicine, gene therapies, and gene editing are transforming medicines themselves.

Taken altogether, biotech is remaking sick care into genuine healthcare. It's changing the medicine from the one-size-fits-all system we all grew up with to a totally new model: future-looking, proactive, personalized, precision medicine.

Not only is healthcare being transformed top to bottom by this geometric progression in technology, but costs are plummeting, as they are in other areas of

daily life. For example: We forget how much cellphones used to cost. I actually had the first commercial model back in the 1980s, a Motorola that set me back \$3,995—the equivalent of more than \$10,000 today.¹ It was more than a foot long and weighed nearly two pounds! The battery charged for six hours, and it only gave you thirty minutes of talk time. Today you can get the latest Apple iPhone for free with most cell service contracts—and it has one hundred times more computational power than the computer that took the Apollo 11 astronauts to the moon.

Or think about this: Your computer runs on microchips—they're the brains of the machine. The first microchip contained 4,000 transistors that cost a dollar apiece. Today's state-of-the-art microchips feature more than six *trillion* transistors that cost an infinitesimal fraction of a penny. **They're 6,500 times faster and 4.2 million times cheaper!**

Our access to information, education, and entertainment has expanded exponentially as well. Every single day, **eighty-two** *years*' worth of new video is uploaded to YouTube, including entire courses from nearly every university in the world.

How do these trends relate to healthcare? Well, consider this: Less than twenty-five years ago, it took more than a decade and cost \$2.7 billion to read a complete human genome, the full set of genetic instructions for a person's growth and development. Today it's done for under \$600—and completed overnight.²

We now have the technology to "write over" a genome to *cure* sickle cell anemia and some forms of congenital blindness. Stem cells can regrow healthy lungs once thought to be damaged beyond repair. Other "living" medicines—using enhanced T cells or natural killer (NK) cells can supercharge our immune system. Pharmaceutical-quality over-thecounter supplements exist today that can restore or enhance our energy and zest for the highest possible quality of life.

Do I have your attention? Are you ready to join me on this adventure? In fact, the innovations I've just mentioned are only a sliver of what you'll find in the chapters ahead! But before we go any further into the marvels of regenerative medicine, before we share more about these life-changing, life-saving formulas, I need to tell you a story. I need to explain what brought me to the Vatican in the first place—what happened in my own life to make me rethink everything I thought I knew about health and healthcare. After all, if you'd told me ten years ago that I'd be rubbing shoulders with these scientific superstars, I'd have laughed!

So how did I, of all people, become an evangelist for these groundbreaking advances in cellular and molecular medicine? How did I learn that our bodies could self-renew and self-heal to the point that science fiction is turning into science fact?

In short, how did I end up here with you right now, preparing to tell you about all of these remarkable technological breakthroughs—advances that I'm convinced can help you and your loved ones live much healthier, longer, more vibrant, more energetic, and more joyful lives?

FROM PAIN TO POWER

"Do not judge me by my successes, judge me by how many times I fell down and got back up again."

-NELSON MANDELA

Like all of us, I arrived at where I am today because of a series of decisions. Some of them were conscious and deliberate. But as I look back, I believe without a doubt in the element of grace, the times when I was guided to the right answer. When challenging circumstances reshaped my core beliefs and made me willing to seize an opportunity that changed everything. I'm sure you've experienced moments like this in your life. You know what I'm talking about. Where something terrible happened, something so painful that you'd never want to go through it again, or have anyone you care about go through it, but afterward, you realized that challenging time made you grow. It made you care more, produced a different level of drive that helped you improve the quality of your life or the lives of those you love. Many of these painful experiences are what prepared me to write this book. The sum of the darkest and most difficult times gave me the insights that I'm ready to share with you today—insights that can boost your health, happiness, and vitality. That can make life truly worth living.

It all began with the gift of growing up in a tough environment. Don't get me wrong. There was lots of love in my family. But my upbringing was also filled with violence, chaos, insecurity, and fear. My mom was wonderful in so many ways, but she struggled with addictions to alcohol and prescription drugs. Many times we were too broke to buy food or clothes. I was desperate for answers, desperate to learn anything that could ease my suffering.

For as long as I can remember, I also hated to see others suffer. That's why I've spent more than four and a half decades of my life working to help millions of people uncover the most effective strategies to get from where they are to where they truly want to be. To achieve their dreams and more—to live a life of meaning and fulfillment. I'm obsessed with helping people lift themselves up from pain to power. But when I was starting out, I didn't have a single role model for success or achievement. So what could I do? Where could I turn for insight and inspiration?

I turned to books—my great escape. I discovered that I could enter the world of philosophy by reading the essays of Ralph Waldo Emerson. I could enter the world of psychology by reading *Man's Search for Meaning* by Viktor Frankl. So I took a speed-reading course and set myself a goal of reading one book a day. As you might have predicted, that turned out to be a bit of a stretch! But I was so hungry for knowledge that I read more than 700 books in seven years. I raced through them in an insatiable quest to learn everything and anything that could help me or anyone who would listen to me! In high school, I was known as Mr. Solution. If you had a question, I had an answer.

When I was seventeen years old and supporting myself by working as a janitor, I found my first moment of grace. I met Jim Rohn. A renowned personal development speaker and business philosopher, Jim was the man who helped me to see that for things to change, *I* had to change. For my life to get better, *I* had to get better. Bemoaning my past wouldn't get me to a brighter future. Complaining about my current stressful circumstances wouldn't help. Neither would hoping my luck would change or wishing on a star.

What Jim taught me was this: If you want to succeed at anything—whether it's building a hugely profitable business, constructing a stormproof investment portfolio, or creating a healthy lifestyle that fills you with boundless energy—you need to study people who have already achieved the result you're after. In other words, success leaves clues. If a person has sustained success in any long-term ambition—whether it was losing weight, growing a business, sustaining an extraordinary relationship then luck has nothing to do with it. They're doing something *different* than you are. So you need to understand exactly *what* they're doing differently, and precisely *how* they've mastered the skills you'll need to replicate their success.

Jim got me to start focusing on the *few who do* in life, not just the many who talk. I began to appreciate the value of role models, those special people who can help you identify a *proven* approach instead of expending all your energy in trial and error. If there's already a paved express lane to power, why not follow it?

But remember, I was Mr. Solution! So I kept reading voraciously, kept studying the most successful people in every area I wanted to master, kept applying their time-tested strategies. Before long, I'd gathered enough answers to become a coach. I began with one-on-one sessions and built up to small seminars and then groups of several hundred people. Before long, I was working with Olympic gold medalists, billionaire businessmen, and some of the world's greatest entertainers. I had found my calling.

It was a beautiful life. I had the opportunity to share the insights and strategies I'd learned and help others connect with their inner strength, courage, and purpose. And, most important, to find out how to get quicker, faster, and more satisfying results. But the truth is, I was a different person back then than I am today. In those early years of my career, I didn't yet know how to handle the fearful part of the ancient fight-or-flight brain that exists inside us all. I'm guessing you've experienced this, too—those times when your uncertainty runs wild, spurring your mind to invent far-fetched disaster scenarios that would earn you a fortune if you wrote made-for-TV movies! I must have watched a lot of those films, because I started to develop a terrible sense of foreboding about my future.