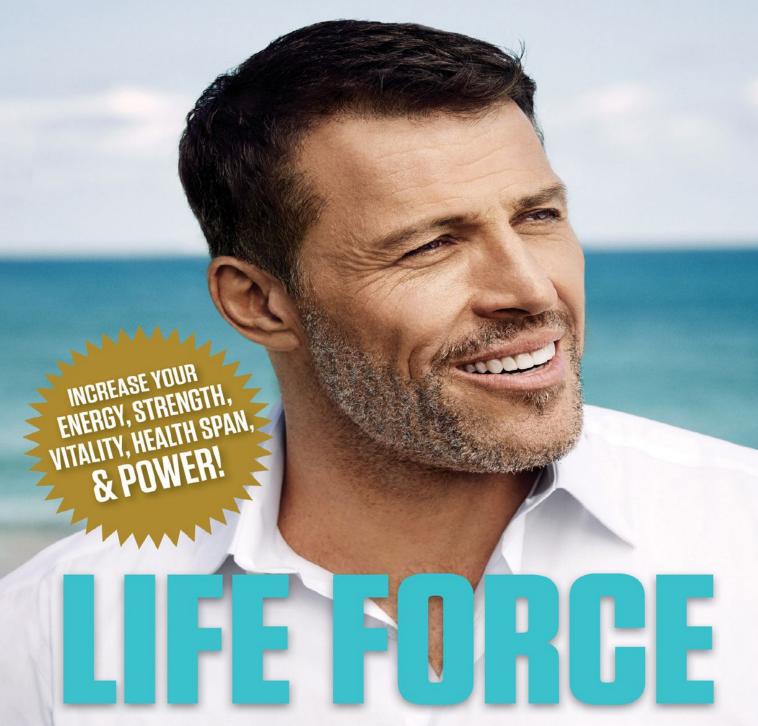
#1 NEW YORK TIMES BESTSELLER

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

LIFE FORCE

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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.