

Linked The New Science Of Networks

This nationally bestselling book explains the shocking new science of how hormones are wreaking havoc on the body, and the delicious solution that improves health, reduces pain, and even helps to shed weight. Hidden in everyday foods are the causes of a surprising range of health problems: infertility, menstrual cramps, weight gain, hair loss, breast and prostate cancer, hot flushes, and much more. All of these conditions have one thing in common: they are fuelled by hormones that are hiding in foods or are influenced by the foods we eat. Your Body in Balance provides step-by-step guidance for understanding what's at the root of your suffering-and what you can do to feel better fast. Few people realize that a simple food prescription can help you tackle all these and more by gently restoring your hormone balance, with benefits rivalling medications. Neal Barnard, MD, a leading authority on nutrition and health, offers insight into how dietary changes can alleviate years of stress, pain, and illness. What's more, he also provides delicious and easy-to-make hormone-balancing recipes, including: * Cauliflower Buffalo Chowder * Kung Pao Lettuce Wraps * Butternut Breakfast Tacos * Mediterranean Croquettes * Apple Pie Nachos * Brownie Batter Hummus Your Body in Balance gives new hope for people struggling with health issues. Thousands of people have already reclaimed their lives and their health through the strategic dietary changes described in this book - and now it's your turn.

#1 NEW YORK TIMES BESTSELLER • “The story of modern medicine and bioethics—and, indeed, race relations—is refracted beautifully, and movingly.”—Entertainment Weekly
NOW A MAJOR MOTION PICTURE FROM HBO® STARRING OPRAH WINFREY AND ROSE BYRNE • ONE OF THE “MOST INFLUENTIAL” (CNN), “DEFINING” (LITHUB), AND “BEST” (THE PHILADELPHIA INQUIRER) BOOKS OF THE DECADE • ONE OF ESSENCE’S 50 MOST IMPACTFUL BLACK BOOKS OF THE PAST 50 YEARS • WINNER OF THE CHICAGO TRIBUNE HEARTLAND PRIZE FOR NONFICTION NAMED ONE OF THE BEST BOOKS OF THE YEAR BY The New York Times Book Review • Entertainment Weekly • O: The Oprah Magazine • NPR • Financial Times • New York • Independent (U.K.) • Times (U.K.) • Publishers Weekly • Library Journal • Kirkus Reviews • Booklist • Globe and Mail Her name was Henrietta

Lacks, but scientists know her as HeLa. She was a poor Southern tobacco farmer who worked the same land as her slave ancestors, yet her cells—taken without her knowledge—became one of the most important tools in medicine: The first “immortal” human cells grown in culture, which are still alive today, though she has been dead for more than sixty years. HeLa cells were vital for developing the polio vaccine; uncovered secrets of cancer, viruses, and the atom bomb’s effects; helped lead to important advances like in vitro fertilization, cloning, and gene mapping; and have been bought and sold by the billions. Yet Henrietta Lacks remains virtually unknown, buried in an unmarked grave. Henrietta’s family did not learn of her “immortality” until more than twenty years after her death, when scientists investigating HeLa began using her husband and children in research without informed consent. And though the cells had launched a multimillion-dollar industry that sells human biological materials, her family never saw any of the profits. As Rebecca Skloot so brilliantly shows, the story of the Lacks family—past and present—is inextricably connected to the dark history of experimentation on African Americans, the birth of bioethics, and the legal battles over whether we control the stuff we are made of. Over the decade it took to uncover this story, Rebecca became enmeshed in the lives of the Lacks family—especially Henrietta’s daughter Deborah. Deborah was consumed with questions: Had scientists cloned her mother? Had they killed her to harvest her cells? And if her mother was so important to medicine, why couldn’t her children afford health insurance? Intimate in feeling, astonishing in scope, and impossible to put down, *The Immortal Life of Henrietta Lacks* captures the beauty and drama of scientific discovery, as well as its human consequences.

"This is not just an important but an imperative project: to approach the problem of randomness and success using the state of the art scientific arsenal we have. Barabasi is the person."--Nassim Nicholas Taleb, author of the New York Times bestselling *The Black Swan* and Distinguished Professor of Risk Engineering at NYU An international bestseller In the bestselling tradition of Malcom Gladwell, James Gleick, and Nate Silver, prominent professor László Barabási gives us a trailblazing book that promises to

transform the very foundations of how our success-obsessed society approaches their professional careers, life pursuits and long-term goals. Too often, accomplishment does not equal success. We did the work but didn't get the promotion; we played hard but weren't recognized; we had the idea but didn't get the credit. We convince ourselves that talent combined with a strong work ethic is the key to getting ahead, but also realize that combination often fails to yield results, without any deeper understanding as to why. Recognizing this striking disconnect, the author, along with a team of renowned researchers and some of the most advanced data-crunching systems on the planet, dedicated themselves to one goal: uncovering that ever-elusive link between performance and success. Now, based on years of academic research, *The Formula* finally unveils the groundbreaking discoveries of their pioneering study, not only highlighting the scientific and mathematic principles that underpin success, but also revolutionizing our understanding of: Why performance is necessary but not adequate Why "Experts" are often wrong How to assemble a creative team primed for success How to most effectively engage our networks And much more.

New York Times Bestseller *Stop—and even reverse!—age-related weight gain and muscle loss with the first-ever weight-loss plan specifically designed to shrink your belly, extend your life, and create your healthiest self at mid-life and beyond.* You don't have to gain weight as you age. That's the simple yet revolutionary promise of *The Whole Body Reset*, which uncovers why standard diet and exercise advice stops working for us as we approach midlife—and reveals how simple changes to the way we eat can halt, and even reverse, age-related weight gain and muscle loss. *The Whole Body Reset* presents stunning new evidence about the power of "protein timing" for people at midlife—research that blows away current government guidelines, refutes the myth of slowing metabolisms and "inevitable" weight gain, and changes the way people in their mid-forties and older should think about food. *The Whole Body Reset* explains in simple, inspiring terms exactly how our bodies change with age, and how eating to accommodate those changes can make us respond to exercise as if we were twenty to thirty years younger. Developed by AARP, tested by a panel of more than 100 AARP employees,

and approved by an international board of doctors, nutritionists, and fitness experts, *The Whole Body Reset* doesn't use diet phases, eating windows, calorie restriction, or other trendy gimmicks. Its six simple secrets and scores of recipes are easy to follow, designed for real people living in the real world. A dining guide even shows how to follow this program in popular restaurants from McDonald's to Starbucks to Olive Garden. And best of all: It works!

Unlocking the Power of Sleep and Dreams

Linked Data

Why Having Too Little Means So Much

The Structure and Dynamics of Networks

Drawdown

The New Psychology of Success

LinkedThe New Science Of Networks Science Of NetworksBasic Books

When Elissa learns her telepathic twin is the subject of government experiments, the girls find themselves on the run with secrets worth killing for in this futuristic, romantic thriller. "Sparked with danger and tinged with romance, *Linked* is a roller-coaster ride into space that just about everyone should enjoy" (Booklist, starred review). Elissa used to have it all: looks, popularity, and a bright future. Now, all she has is nightmarish visions and unexplained bruises. Finally, she's promised a cure, and a surgery is scheduled. But on the eve of the procedure, she discovers the truth behind her visions: She's seeing the world through another girl's eyes. A world filled with pain and wires and weird machines. Elissa follows her visions, only to find a battered, broken girl on the run. A girl—Lin—who looks exactly like Elissa, down to the matching bruises. A twin she never knew existed. Elissa helps Lin evade the government agents who are ruthlessly tracking her down, but they're struggling to avoid capture, and soon Elissa is forced to turn to the only person who can help: Cadan, her brother's infuriating, arrogant best friend, and new graduate of the SFI space flight academy. Cadan is their one chance at safety. But Lin is too valuable to let go, and Elissa has knowledge that is too dangerous. The government will stop at nothing to get them back. "Action-packed and thoroughly engrossing, this novel offers readers a classic sci-fi, space-travel adventure at its best" (BCCB).

A cocktail party. A terrorist cell. Ancient bacteria. An international conglomerate. All are networks, and all are a part of a surprising scientific revolution. In *Linked*, Albert-László Barabási, the nation's foremost expert in the new science of networks, takes us on an intellectual adventure to prove that social networks, corporations, and living organisms are more similar than previously thought. Barabási shows that grasping a full understanding of network science will someday allow us to design blue-chip businesses, stop the outbreak of deadly diseases, and influence the exchange of ideas and information. Just as James Gleick and the Erdős–Rényi model brought the discovery of chaos theory to the general public, *Linked* tells the story of the true science of the future and of experiments in statistical mechanics on the internet, all vital parts of what would eventually be called the Barabási–Albert model.

Mentorship is a catalyst capable of unleashing one's potential for discovery, curiosity, and participation in STEMM and subsequently improving the training environment in which that STEMM potential is fostered. Mentoring relationships provide developmental spaces in which students' STEMM skills are honed and pathways into STEMM fields can be discovered. Because mentorship can be so influential in shaping the future STEMM workforce, its occurrence should not be left to chance or idiosyncratic implementation. There is a gap between what we know about effective mentoring and how it is practiced in higher education. The Science of Effective Mentorship in STEMM studies mentoring programs and practices at the undergraduate and graduate levels. It explores the importance of mentorship, the science of mentoring relationships, mentorship of underrepresented students in STEMM, mentorship structures and behaviors, and institutional cultures that support mentorship. This report and its complementary interactive guide present insights on effective programs and practices that can be adopted and adapted by institutions, departments, and individual faculty members.

Epic Adventures in the Search for the Origins of Species

Concepts of Biology

Fractal Concepts in Surface Growth

Essentials of Glycobiology

The Whole Body Reset

The Role of Telehealth in an Evolving Health Care Environment

An encyclopedia designed especially to meet the needs of elementary, junior high, and senior high school students.

"The Genesis One Code" offers a careful examination of the relationship between scientific theory and biblical teaching. The book targets the origins debate from a fresh perspective informed by scientific and spiritual research and demonstrates an alignment between the dates of key events described in Genesis 1 and 2 with those derived from scientific theory and observation.

"Pollan keeps you turning the pages . . . cleareyed and assured." —New York Times A #1 New York Times Bestseller, New York Times Book Review 10 Best Books of 2018, and New York Times Notable Book A brilliant and brave investigation into the medical and scientific revolution taking place around psychedelic drugs--and the spellbinding story of his own life-changing psychedelic experiences When Michael Pollan set out to research how LSD and psilocybin (the active ingredient in magic mushrooms) are being used to provide relief to people suffering from difficult-to-treat conditions such as depression, addiction and anxiety, he did not intend to write what is undoubtedly his most personal book. But upon discovering how these remarkable substances are improving the lives not only of the mentally ill but

also of healthy people coming to grips with the challenges of everyday life, he decided to explore the landscape of the mind in the first person as well as the third. Thus began a singular adventure into various altered states of consciousness, along with a dive deep into both the latest brain science and the thriving underground community of psychedelic therapists. Pollan sifts the historical record to separate the truth about these mysterious drugs from the myths that have surrounded them since the 1960s, when a handful of psychedelic evangelists inadvertently catalyzed a powerful backlash against what was then a promising field of research. A unique and elegant blend of science, memoir, travel writing, history, and medicine, *How to Change Your Mind* is a triumph of participatory journalism. By turns dazzling and edifying, it is the gripping account of a journey to an exciting and unexpected new frontier in our understanding of the mind, the self, and our place in the world. The true subject of Pollan's "mental travelogue" is not just psychedelic drugs but also the eternal puzzle of human consciousness and how, in a world that offers us both suffering and joy, we can do our best to be fully present and find meaning in our lives.

A surprising and intriguing examination of how scarcity—and our flawed responses to it—shapes our lives, our society, and our culture

Deep Learning

Modeling and Risk Management for Equity-Linked Life

Insurance

The Hidden Patterns Behind Everything We Do, from Your E-mail to Bloody Crusades

Dr. Mary's Monkey

Eat to Beat Disease

The Most Comprehensive Plan Ever Proposed to Reverse Global Warming

A revolutionary new theory showing how we can predict human behavior from a radical genius and bestselling author Can we scientifically predict our future? Scientists and pseudo scientists have been pursuing this mystery for hundreds and perhaps thousands of years. But now, astonishing new research is revealing patterns in human behavior previously thought to be purely random. Precise, orderly, predictable patterns... Albert Laszlo Barabasi, already the world's preeminent researcher on the science of networks, describes his work on this profound mystery in Bursts, a stunningly original investigation into human nature.

His approach relies on the digital reality of our world, from mobile phones to the Internet and email, because it has turned society into a huge research laboratory. All those electronic trails of time stamped texts, voicemails, and internet searches add up to a previously unavailable massive data set of statistics that track our movements, our decisions, our lives. Analysis of these trails is offering deep insights into the rhythm of how we do everything. His finding? We work and fight and play in short flourishes of activity followed by next to nothing. The pattern isn't random, it's "bursty." Randomness does not rule our lives in the way scientists have assumed up until now. Illustrating this revolutionary science, Barabasi artfully weaves together the story of a 16th century burst of human activity—a bloody medieval crusade launched in his homeland, Transylvania—with the modern tale of a contemporary artist hunted by the FBI through our post 9/11 surveillance society. These narratives illustrate how predicting human behavior has long been the obsession, sometimes the duty, of those in power. Barabási's astonishingly wide range of examples from seemingly unrelated areas include how dollar bills move around the U.S., the pattern everyone follows in writing email, the spread of epidemics, and even the flight patterns of albatross. In all these phenomena a virtually identical, mathematically described bursty pattern emerges. Bursts reveals what this amazing new research is showing us about where individual spontaneity ends and predictability in human behavior begins. The way you think about your own potential to do something truly extraordinary will never be the same.

This book brings together two of the most exciting and widely studied subjects in modern physics: namely fractals and surfaces. To the community interested in the study of surfaces and interfaces, it brings the concept of fractals. To the community interested in the exciting field of fractals and their application, it demonstrates how these concepts may be used in the study of surfaces. The authors cover, in simple terms, the various methods and theories developed over the past ten years to study surface growth. They describe how one can use fractal concepts successfully to describe and predict the morphology resulting from various growth processes. Consequently, this book will appeal to physicists working in condensed matter physics and statistical mechanics, with an interest in fractals and their application. The first chapter of this important new text is available on the Cambridge Worldwide Web server:

<http://www.cup.cam.ac.uk/onlinepubs/Textbooks/textbookstop.html>

Illustrated throughout in full colour, this pioneering text is the only book you need for an introduction to network science.

"Sleep is one of the most important but least understood aspects of our life, wellness, and longevity ... An explosion of scientific discoveries in the last twenty years has shed new light on this fundamental aspect of our lives. Now ... neuroscientist and sleep expert Matthew Walker gives us a new understanding of the vital importance of sleep and dreaming"--Amazon.com.

Nexus: Small Worlds and the Groundbreaking Theory of Networks
Network Science

In the Next Galaxy

The Genesis One Code

Your Weight-Loss Plan for a Flat Belly, Optimum Health & a Body You'll

Love at Midlife and Beyond

A New York, Mid-Atlantic Guide for Patients and Health Professionals

In 1996, the Institute of Medicine (IOM) released its report *Telemedicine: A Guide to Assessing Telecommunications for Health Care*. In that report, the IOM Committee on Evaluating Clinical Applications of Telemedicine found telemedicine is similar in most respects to other technologies for which better evidence of effectiveness is also being demanded. Telemedicine, however, has some special characteristics-shared with information technologies generally-that warrant particular notice from evaluators and decision makers. Since that time, attention to telehealth has continued to grow in both the public and private sectors. Peer-reviewed journals and professional societies are devoted to telehealth, the federal government provides grant funding to promote the use of telehealth, and the private technology industry continues to develop new applications for telehealth. However, barriers remain to the use of telehealth modalities, including issues related to reimbursement, licensure, workforce, and costs. Also, some areas of telehealth have developed a stronger evidence base than others. The Health Resources and Service Administration (HRSA) sponsored the IOM in holding a workshop in Washington, DC, on August 8-9 2012, to examine how the use of telehealth technology can fit into the U.S. health care system. HRSA asked the IOM to focus on the potential for telehealth to serve geographically isolated individuals and extend the reach of scarce resources while also emphasizing the quality and value in the delivery of health care services. This workshop summary discusses the evolution of telehealth since 1996, including the increasing role of the private sector, policies that have promoted or delayed the use of telehealth, and consumer acceptance of telehealth. *The Role of Telehealth in an Evolving Health Care Environment: Workshop Summary* discusses the current evidence base for telehealth, including available data and gaps in data; discuss how technological developments, including mobile telehealth, electronic intensive care units, remote monitoring, social networking, and wearable devices, in conjunction with the push for electronic health records, is changing the delivery of health care in rural and urban environments. This report also summarizes actions that the U.S. Department of Health and Human Services (HHS) can undertake to further the use of telehealth to improve health care outcomes while controlling costs in the current health care environment.

Major New York Times bestseller Winner of the National Academy of Sciences Best Book Award in 2012 Selected by the New York Times Book Review as one of the ten best books of 2011 A Globe and Mail Best Books of the Year 2011 T

One of The Economist's 2011 Books of the Year One of The Wall Street Journal's Best Nonfiction Books of the Year 2011 2013 Presidential Medal of Freedom Recipient Kahneman's work with Amos Tversky is the subject of Michael Lewis's *The Undoing Project: A Friendship That Changed Our Minds* In the international bestseller, *Thinking, Fast and Slow*, Daniel Kahneman, the renowned psychologist and winner of the Nobel Prize in Economics, takes us on a groundbreaking tour of the mind and explains the two systems that drive the way we think. System 1 is fast, intuitive, and emotional; System 2 is slower, more deliberative, and more logical. The impact of overconfidence on corporate strategies, the difficulties of predicting what will make us happy in the future, the profound effect of cognitive biases on everything from playing the stock market to planning our next vacation—each of these can be understood only by knowing how the two systems shape our judgments and decisions. Engaging the reader in a lively conversation about how we think, Kahneman reveals where we can and cannot trust our intuitions and how we can tap into the benefits of slow thinking. He offers practical and enlightening insights into how choices are made in both our business and our personal lives—and how we can use different techniques to guard against the mental glitches that often get us into trouble. Winner of the National Academy of Sciences Best Book Award and the Los Angeles Times Book Prize and selected by The New York Times Book Review as one of the ten best books of 2011, *Thinking, Fast and Slow* is destined to be a classic.

- New York Times bestseller • The 100 most substantive solutions to reverse global warming, based on meticulous research by leading scientists and policymakers around the world "At this point in time, the *Drawdown* book is exactly what is needed; a credible, conservative solution-by-solution narrative that we can do it. Reading it is an effective inoculation against the widespread perception of doom that humanity cannot and will not solve the climate crisis. Reported by-effects include increased determination and a sense of grounded hope." —Per Espen Stoknes, Author, *What We Think About When We Try Not To Think About Global Warming* "There's been no real way for ordinary people to get an understanding of what they can do and what impact it can have. There remains no single, comprehensive, reliable compendium of carbon-reduction solutions across sectors. At least until now. . . . The public is hungry for this kind of practical wisdom." —David Roberts, *Vox* "This is the ideal environmental sciences textbook—only it is too interesting and inspiring to be called a textbook" —Peter Kareiva, Director of the Institute of the Environment and Sustainability, UCLA In the face of widespread fear and apathy, an international coalition of researchers, professionals, and scientists have come together to offer a set of realistic and bold solutions to climate change. One hundred techniques and practices are described here—some are well known; some you may have never heard of. They range from clean energy to educating girls in lower-income countries to land use practices that pull carbon out of the air. The solutions exist and are economically viable, and communities throughout the world are currently

enacting them with skill and determination. If deployed collectively on a global scale over the next thirty years, they represent a credible path forward, not just to slow the earth's warming but to reach drawdown, that point in time when greenhouse gases in the atmosphere peak and begin to decline. These measures promise cascading benefits to human health, security, prosperity, and well-being—giving us every reason to see this planetary crisis as an opportunity to create a just and livable world.

In the 1980's, James Gleick's *Chaos* introduced the world to complexity. Now, Albert-László Barabási's *Linked* reveals the next major scientific leap: the study of networks. We've long suspected that we live in a small world, where everything is connected to everything else. Indeed, networks are pervasive--from the human brain to the Internet to the economy to our group of friends. These linkages, it turns out, aren't random. All networks, to the great surprise of scientists, have underlying order and follow simple laws. Understanding the structure and behavior of these networks will help us do some amazing things, from designing the optimal organization of a firm to stopping a disease outbreak before it spreads catastrophically. In *Linked*, Barabási, a physicist whose work has revolutionized the study of networks, traces the development of this rapidly unfolding science and introduces us to the scientists carrying out this pioneering work. These "new cartographers" are mapping networks in a wide range of scientific disciplines, proving that social networks, corporations, and cells are more similar than they are different, and providing important new insights into the interconnected world around us. This knowledge, says Barabási, can shed light on the robustness of the Internet, the spread of fads and viruses, even the future of democracy. Engaging and authoritative, *Linked* provides an exciting preview of the next century in science, guaranteed to be transformed by these amazing discoveries. From *Linked*: This book has a simple message: think networks. It is about how networks emerge, what they look like, and how they evolve. It aims to develop a web-based view of nature, society, and technology, providing a unified framework to better understand issues ranging from the vulnerability of the Internet to the spread of diseases. Networks are present everywhere. All we need is an eye for them... We will see the challenges doctors face when they attempt to cure a disease by focusing on a single molecule or gene, disregarding the complex interconnected nature of the living matter. We will see that hackers are not alone in attacking networks: we all play Goliath, firing shots at a fragile ecological network that, without further support, could soon replicate our worst nightmares by turning us into an isolated group of species... *Linked* is meant to be an eye-opening trip that challenges you to walk across disciplines by stepping out of the box of reductionism. It is an invitation to explore link by link the next scientific revolution: the new science of networks.

Attached

The New Science of a Lost Art

Introduction to Information Retrieval

The New Science Of Networks Science Of Networks

How to Change Your Mind

National Book Award Finalist: A biologist's "thoroughly enjoyable" account of the expeditions that unearthed the history of life on our planet (Publishers Weekly). Not so long ago, most of our world was an unexplored wilderness. Our sense of its age was vague and vastly off the mark, and much of the knowledge of our own species' history was a set of fantastic myths and fairy tales. But scientists were about to embark on an amazing new era of understanding. From the New York Times-bestselling author of The Big Picture, this book leads us on a rousing voyage that recounts the most important discoveries in two centuries of natural history: from Darwin's trip around the world to Charles Walcott's discovery of pre-Cambrian life in the Grand Canyon; from Louis and Mary Leakey's investigation of our deepest past in East Africa to the trailblazers in modern laboratories who have located a time clock in our DNA. Filled with the same sense of adventure that spurred on these extraordinary men and women, Remarkable Creatures is a "stirring introduction to the wonder of evolutionary biology" (Kirkus Reviews). "Charming and enlightening." —San Francisco Chronicle "As fast-paced as a detective story." —Nature

Informative text, pictures and illustrations highlighting outer space and the solar system. Complete Books.

An unforgettable novel from the New York Times bestseller Gordon Korman Link, Michael, and Dana live in a quiet town. But it's woken up very quickly when someone sneaks into school and vandalizes it with a swastika. Nobody can believe it. How could such a symbol of hate end up in the middle of their school? Who would do such a thing? Because Michael was the first person to see it, he's the first suspect. Because Link is one of the most popular guys in school, everyone's looking to him to figure it out. And because Dana's the only Jewish girl in the whole town, everyone's treating her more like an outsider than ever. The mystery deepens as more swastikas begin to appear. Some students decide to fight back and start a project to bring people together instead of dividing them further. The closer Link, Michael, and Dana get to the truth, the more there is to face—not just the crimes of the present, but the crimes of the past. With Linked, Gordon Korman, the author of the acclaimed novel Restart, poses a mystery for all readers where the who did it? isn't nearly as important as the why?

Presents the fundamental principles of "small worlds" theory, highlighting groundbreaking research, its benefits and applications to diverse problems, and the logic behind the "six degrees of separation." Reprint.

Bursts

What the New Science of Psychedelics Teaches Us About Consciousness, Dying, Addiction, Depression, and Transcendence

Investment Guarantees

Evolving the Web Into a Global Data Space

How the Unsolved Murder of a Doctor, a Secret Laboratory in New Orleans and Cancer-Causing Monkey Viruses Are Linked to Lee Harvey Oswald, the JFK Assassination and Emerging Global Epidemics

Your Body In Balance

The purpose of this manual is to provide an educational genetics resource for individuals, families, and health professionals in the New York - Mid-Atlantic region and

increase awareness of specialty care in genetics. The manual begins with a basic introduction to genetics concepts, followed by a description of the different types and applications of genetic tests. It also provides information about diagnosis of genetic disease, family history, newborn screening, and genetic counseling. Resources are included to assist in patient care, patient and professional education, and identification of specialty genetics services within the New York - Mid-Atlantic region. At the end of each section, a list of references is provided for additional information. Appendices can be copied for reference and offered to patients. These take-home resources are critical to helping both providers and patients understand some of the basic concepts and applications of genetics and genomics.

The World Wide Web has enabled the creation of a global information space comprising linked documents. As the Web becomes ever more enmeshed with our daily lives, there is a growing desire for direct access to raw data not currently available on the Web or bound up in hypertext documents. Linked Data provides a publishing paradigm in which not only documents, but also data, can be a first class citizen of the Web, thereby enabling the extension of the Web with a global data space based on open standards - the Web of Data. In this Synthesis lecture we provide readers with a detailed technical introduction to Linked Data. We begin by outlining the basic principles of Linked Data, including coverage of relevant aspects of Web architecture. The remainder of the text is based around two main themes - the publication and consumption of Linked Data. Drawing on a practical Linked Data scenario, we provide guidance and best practices on: architectural approaches to publishing Linked Data; choosing URIs and vocabularies to identify and describe resources; deciding what data to return in a description of a resource on the Web; methods and frameworks for automated linking of data sets; and testing and debugging approaches for Linked Data deployments. We give an overview of existing Linked Data applications and then examine the architectures that are used to consume Linked Data from the Web, alongside existing tools and frameworks that enable these. Readers can expect to gain a rich technical understanding of Linked Data fundamentals, as the basis for application development, research or further study. Table of Contents: List of Figures / Introduction / Principles of Linked Data / The Web of Data / Linked Data Design Considerations / Recipes for Publishing Linked Data / Consuming Linked Data / Summary and Outlook

A comprehensive guide to investment guarantees in equity-linked life insurance Due to the convergence of financial and insurance markets, new forms of investment guarantees are emerging which require financial service professionals to become savvier in modeling and risk management. With chapters that discuss stock return models, dynamic hedging, risk measures, Markov Chain Monte Carlo estimation, and much more, this one-stop reference contains the valuable insights and proven techniques that will allow readers to better understand the theory and practice of investment guarantees and equity-linked insurance policies. Mary Hardy, PhD (Waterloo, Ontario, Canada), is an Associate Professor and Associate Chair of Actuarial Science at the University of Waterloo and is a Fellow of the Institute of Actuaries and an Associate of the Society of Actuaries, where she is a frequent speaker. Her research covers topics in life insurance solvency and risk management, with particular emphasis on equity-linked insurance. Hardy is an Associate Editor of the North American Actuarial Journal and the ASTIN Bulletin and is a Deputy Editor of the

British Actuarial Journal.

The updated edition of the bestselling book that has changed millions of lives with its insights into the growth mindset “Through clever research studies and engaging writing, Dweck illuminates how our beliefs about our capabilities exert tremendous influence on how we learn and which paths we take in life.”—Bill Gates, GatesNotes After decades of research, world-renowned Stanford University psychologist Carol S. Dweck, Ph.D., discovered a simple but groundbreaking idea: the power of mindset. In this brilliant book, she shows how success in school, work, sports, the arts, and almost every area of human endeavor can be dramatically influenced by how we think about our talents and abilities. People with a fixed mindset—those who believe that abilities are fixed—are less likely to flourish than those with a growth mindset—those who believe that abilities can be developed. Mindset reveals how great parents, teachers, managers, and athletes can put this idea to use to foster outstanding accomplishment. In this edition, Dweck offers new insights into her now famous and broadly embraced concept. She introduces a phenomenon she calls false growth mindset and guides people toward adopting a deeper, truer growth mindset. She also expands the mindset concept beyond the individual, applying it to the cultures of groups and organizations. With the right mindset, you can motivate those you lead, teach, and love—to transform their lives and your own.

Remarkable Creatures

The New Science of How Your Body Can Heal Itself

College Physics

The New Science of Food, Hormones and Health

Usborne Internet-Linked Book of Astronomy and Space

Cloud Atlas

This new updated edition is not only hard cover for long life, but it contains an additional 25 pages of revelations from the author including documents from the FBI, CIA, CDC, and NOPD, plus the actual crime scene photos of the Mary Sherman murder. You'll see why we say this is the "Hottest cold case in America." The 1964 murder of a nationally known cancer researcher sets the stage for this gripping exposé of medical professionals enmeshed in covert government operations over the course of three decades. Following a trail of police records, FBI files, cancer statistics, and medical journals, this revealing book presents evidence of a web of medical secret-keeping that began with the handling of evidence in the JFK assassination and continued apace, sweeping doctors into cover-ups of cancer outbreaks, contaminated polio vaccine, the arrival of the AIDS virus, and biological weapon research using infected monkeys.

Describes outer space and the history of astronomy, including the planets of the solar system, the life of a star, the origin of constellations, and how stars are photographed. Sugar chains (glycans) are often attached to proteins and lipids and have multiple roles in the organization and function of all organisms. "Essentials of Glycobiology" describes their biogenesis and function and offers a useful gateway to the understanding of glycans. Class-tested and coherent, this textbook teaches classical and web information retrieval, including web search and the related areas of text classification and text clustering from basic concepts. It gives an up-to-date treatment of all aspects of the design and implementation of systems for gathering, indexing, and searching documents; methods

for evaluating systems; and an introduction to the use of machine learning methods on text collections. All the important ideas are explained using examples and figures, making it perfect for introductory courses in information retrieval for advanced undergraduates and graduate students in computer science. Based on feedback from extensive classroom experience, the book has been carefully structured in order to make teaching more natural and effective. Slides and additional exercises (with solutions for lecturers) are also available through the book's supporting website to help course instructors prepare their lectures.

The Immortal Life of Henrietta Lacks

Mindset

Scarcity

The Usborne Book of Astronomy & Space

The Formula

Why We Sleep

A New York Times Bestseller A Washington Post Notable Nonfiction Book of 2020 Named a Best Book of 2020 by NPR "A fascinating scientific, cultural, spiritual and evolutionary history of the way humans breathe—and how we've all been doing it wrong for a long, long time." —Elizabeth Gilbert, author of Big Magic and Eat Pray Love No matter what you eat, how much you exercise, how skinny or young or wise you are, none of it matters if you're not breathing properly. There is nothing more essential to our health and well-being than breathing: take air in, let it out, repeat twenty-five thousand times a day. Yet, as a species, humans have lost the ability to breathe correctly, with grave consequences. Journalist James Nestor travels the world to figure out what went wrong and how to fix it. The answers aren't found in pulmonology labs, as we might expect, but in the muddy digs of ancient burial sites, secret Soviet facilities, New Jersey choir schools, and the smoggy streets of São Paulo. Nestor tracks down men and women exploring the hidden science behind ancient breathing practices like Pranayama, Sudarshan Kriya, and Tummo and teams up with pulmonary tinkerers to scientifically test long-held beliefs about how we breathe. Modern research is showing us that making even slight adjustments to the way we inhale and exhale can jump-start athletic performance; rejuvenate internal organs; halt snoring, asthma, and autoimmune disease; and even straighten scoliotic spines. None of this should be possible, and yet it is. Drawing on thousands of years of medical texts and recent cutting-edge studies in pulmonology, psychology, biochemistry, and human physiology, Breath turns the conventional wisdom of what we thought we knew about our most basic biological function on its head. You will never breathe the same again.

From the Internet to networks of friendship, disease transmission, and even terrorism, the concept--and the reality--of networks has come to pervade modern society. But what exactly is a network? What different types of networks are there? Why are they interesting, and what can they tell us? In recent years, scientists from a range of fields--including mathematics, physics, computer science, sociology, and biology--have been pursuing these questions and building a new "science of networks." This book brings together for the first time a set of seminal articles representing research from across these disciplines. It is an ideal sourcebook for the key research in this fast-growing field. The book is organized into four sections, each preceded by an editors' introduction summarizing its contents and general theme. The first section sets the stage by discussing some of the historical antecedents of contemporary research in the area. From there the book moves to the empirical side of the science of networks before turning to the foundational modeling ideas that have been the focus of much subsequent activity. The book closes by taking the reader to the cutting edge of network science--the relationship

between network structure and system dynamics. From network robustness to the spread of disease, this section offers a potpourri of topics on this rapidly expanding frontier of the new science.

Eat your way to better health with this New York Times bestseller on food's ability to help the body heal itself from cancer, dementia, and dozens of other avoidable diseases. Forget everything you think you know about your body and food, and discover the new science of how the body heals itself. Learn how to identify the strategies and dosages for using food to transform your resilience and health in Eat to Beat Disease. We have radically underestimated our body's power to transform and restore our health. Pioneering physician scientist, Dr. William Li, empowers readers by showing them the evidence behind over 200 health-boosting foods that can starve cancer, reduce your risk of dementia, and beat dozens of avoidable diseases. Eat to Beat Disease isn't about what foods to avoid, but rather is a life-changing guide to the hundreds of healing foods to add to your meals that support the body's defense systems, including: Plums Cinnamon Jasmine tea Red wine and beer Black Beans San Marzano tomatoes Olive oil Pacific oysters Cheeses like Jarlsberg, Camembert and cheddar Sourdough bread The book's plan shows you how to integrate the foods you already love into any diet or health plan to activate your body's health defense systems-Angiogenesis, Regeneration, Microbiome, DNA Protection, and Immunity-to fight cancer, diabetes, cardiovascular, neurodegenerative autoimmune diseases, and other debilitating conditions. Both informative and practical, Eat to Beat Disease explains the science of healing and prevention, the strategies for using food to actively transform health, and points the science of wellbeing and disease prevention in an exhilarating new direction.

"Over a decade after its publication, one book on dating has people firmly in its grip." —The New York Times We already rely on science to tell us what to eat, when to exercise, and how long to sleep. Why not use science to help us improve our relationships? In this revolutionary book, psychiatrist and neuroscientist Dr. Amir Levine and Rachel Heller scientifically explain why why some people seem to navigate relationships effortlessly, while others struggle. Discover how an understanding of adult attachment—the most advanced relationship science in existence today—can help us find and sustain love. Pioneered by psychologist John Bowlby in the 1950s, the field of attachment posits that each of us behaves in relationships in one of three distinct ways: • Anxious people are often preoccupied with their relationships and tend to worry about their partner's ability to love them back • Avoidant people equate intimacy with a loss of independence and constantly try to minimize closeness. • Secure people feel comfortable with intimacy and are usually warm and loving. Attached guides readers in determining what attachment style they and their mate (or potential mate) follow, offering a road map for building stronger, more fulfilling connections with the people they love.

Understanding Genetics

Breath

How Everything Is Connected to Everything Else and What It Means for Business, Science, and Everyday Life

Workshop Summary

Linked

The Science of Effective Mentorship in STEMM

A collection of sardonic, crafty poems questions the role of convention in everyday life.

An introduction to a broad range of topics in deep learning, covering mathematical and conceptual background, deep learning techniques used in industry, and research perspectives. "Written by three experts in the field, Deep Learning is the only comprehensive book on the subject." —Elon Musk,

cochair of OpenAI; cofounder and CEO of Tesla and SpaceX Deep learning is a form of machine learning that enables computers to learn from experience and understand the world in terms of a hierarchy of concepts. Because the computer gathers knowledge from experience, there is no need for a human computer operator to formally specify all the knowledge that the computer needs. The hierarchy of concepts allows the computer to learn complicated concepts by building them out of simpler ones; a graph of these hierarchies would be many layers deep. This book introduces a broad range of topics in deep learning. The text offers mathematical and conceptual background, covering relevant concepts in linear algebra, probability theory and information theory, numerical computation, and machine learning. It describes deep learning techniques used by practitioners in industry, including deep feedforward networks, regularization, optimization algorithms, convolutional networks, sequence modeling, and practical methodology; and it surveys such applications as natural language processing, speech recognition, computer vision, online recommendation systems, bioinformatics, and videogames. Finally, the book offers research perspectives, covering such theoretical topics as linear factor models, autoencoders, representation learning, structured probabilistic models, Monte Carlo methods, the partition function, approximate inference, and deep generative models. Deep Learning can be used by undergraduate or graduate students planning careers in either industry or research, and by software engineers who want to begin using deep learning in their products or platforms. A website offers supplementary material for both readers and instructors.

By the New York Times bestselling author of The Bone Clocks | Shortlisted for the Man Booker Prize A postmodern visionary and one of the leading voices in twenty-first-century fiction, David Mitchell combines flat-out adventure, a Nabokovian love of puzzles, a keen eye for character, and a taste for mind-bending, philosophical and scientific speculation in the tradition of Umberto Eco, Haruki Murakami, and Philip K. Dick. The result is brilliantly original fiction as profound as it is playful. In this groundbreaking novel, an influential favorite among a new generation of writers, Mitchell explores with daring artistry fundamental questions of reality and identity. Cloud Atlas begins in 1850 with Adam Ewing, an American notary voyaging from the Chatham Isles to his home in California. Along the way, Ewing is befriended by a physician, Dr. Goose, who begins to treat him for a rare species of brain parasite. . . . Abruptly, the action jumps to Belgium in 1931, where Robert Frobisher, a disinherited bisexual composer, contrives his way into the household of an infirm maestro who has a beguiling wife and a nubile daughter. . . . From there we jump to the West Coast in the 1970s and a troubled reporter named Luisa Rey, who stumbles upon a web of corporate greed and murder that threatens to claim her life. . . . And onward, with dazzling virtuosity, to an inglorious present-day England; to a Korean superstate of the near future

where neocapitalism has run amok; and, finally, to a postapocalyptic Iron Age Hawaii in the last days of history. But the story doesn't end even there. The narrative then boomerangs back through centuries and space, returning by the same route, in reverse, to its starting point. Along the way, Mitchell reveals how his disparate characters connect, how their fates intertwine, and how their souls drift across time like clouds across the sky. As wild as a videogame, as mysterious as a Zen koan, *Cloud Atlas* is an unforgettable tour de force that, like its incomparable author, has transcended its cult classic status to become a worldwide phenomenon. Praise for *Cloud Atlas* “[David] Mitchell is, clearly, a genius. He writes as though at the helm of some perpetual dream machine, can evidently do anything, and his ambition is written in magma across this novel's every page.”—*The New York Times Book Review* “One of those how-the-holy-hell-did-he-do-it? modern classics that no doubt is—and should be—read by any student of contemporary literature.”—Dave Eggers “Wildly entertaining . . . a head rush, both action-packed and chillingly ruminative.”—*People* “The novel as series of nested dolls or Chinese boxes, a puzzle-book, and yet—not just dazzling, amusing, or clever but heartbreaking and passionate, too. I've never read anything quite like it, and I'm grateful to have lived, for a while, in all its many worlds.”—Michael Chabon “*Cloud Atlas* ought to make [Mitchell] famous on both sides of the Atlantic as a writer whose fearlessness is matched by his talent.”—*The Washington Post Book World* “Thrilling . . . One of the biggest joys in *Cloud Atlas* is watching Mitchell sashay from genre to genre without a hitch in his dance step.”—*Boston Sunday Globe* “Grand and elaborate . . . [Mitchell] creates a world and language at once foreign and strange, yet strikingly familiar and intimate.”—*Los Angeles Times*

Concepts of Biology is designed for the single-semester introduction to biology course for non-science majors, which for many students is their only college-level science course. As such, this course represents an important opportunity for students to develop the necessary knowledge, tools, and skills to make informed decisions as they continue with their lives. Rather than being mired down with facts and vocabulary, the typical non-science major student needs information presented in a way that is easy to read and understand. Even more importantly, the content should be meaningful. Students do much better when they understand why biology is relevant to their everyday lives. For these reasons, *Concepts of Biology* is grounded on an evolutionary basis and includes exciting features that highlight careers in the biological sciences and everyday applications of the concepts at hand. We also strive to show the interconnectedness of topics within this extremely broad discipline. In order to meet the needs of today's instructors and students, we maintain the overall organization and coverage found in most syllabi for this course. A strength of *Concepts of Biology* is that instructors can customize the book, adapting it to the approach that works best in their classroom. *Concepts*

of Biology also includes an innovative art program that incorporates critical thinking and clicker questions to help students understand--and apply--key concepts.

The World Book Encyclopedia

The New Science of Adult Attachment and How It Can Help You Find--and Keep-- Love

Thinking, Fast and Slow

The Universal Laws of Success