

Why Evolution Is True

According to polling data, most Americans doubt that evolution is a real phenomenon. And it's no wonder that so many are skeptical: many of today's biology courses and textbooks dwell on the mechanisms of evolution—natural selection, genetic drift, and gene flow—but say little about the evidence that evolution happens at all. How do we know that species change? Has there really been enough time for evolution to operate? With *The Evidence for Evolution*, Alan R. Rogers provides an elegant, straightforward text that details the evidence for evolution. Rogers covers different levels of evolution, from within-species changes, which are much less challenging to see and believe, to much larger ones, say, from fish to amphibian, or from land mammal to whale. For each case, he supplies numerous lines of evidence to illustrate the changes, including fossils, DNA, and radioactive isotopes. His comprehensive treatment stresses recent advances in knowledge but also recounts the give and take between skeptical scientists who first asked "how can we be sure" and then marshaled scientific evidence to attain certainty. *The Evidence for Evolution* is a valuable addition to the literature on evolution and will be essential to introductory courses in the life sciences.

For the first time ever in one volume, here are four of the most influential works of Charles Darwin, reprinted in their entirety, each illuminated by commentary from eminent scientist James D. Watson. Included are *On the Origin of Species*, arguably the most important scientific work of the nineteenth century; *Voyage of the Beagle*, a captivating travelogue richly stocked with observations that helped guide the young Darwin through his evolutionary world view; *The Descent of Man*, which explored the origins of humans and their history; and *The Expressions of Emotions in Man and Animals*, which explored the origin and nature of the mind. With his separate introductions for each of Darwin's books he goes further to explain how the modern considerations underlying genome research would have been impossible without Darwin, bringing a contemporary relevance to these nineteenth century masterworks.

What if the biblical creation account is true, with the origins of Adam and Eve taking place alongside evolution? Building on well-established but overlooked science, S. Joshua Swamidass explains how it's possible for Adam and Eve to be rightly identified as the ancestors of everyone, opening up new possibilities for understanding Adam and Eve consistent both with current scientific consensus and with traditional readings of Scripture.

A Best Book of the Year *Seed Magazine* • *Granta Magazine* • *The Plain-Dealer* In this fascinating and utterly engaging book, Carl Zimmer traces *E. coli*'s pivotal role in the history of biology, from the discovery of DNA to the latest advances in biotechnology. He reveals the many surprising and alarming parallels between *E. coli*'s life and our own. And he describes how *E. coli* changes in real time, revealing billions of years of history encoded within its genome. *E. coli* is also the most engineered species on Earth, and as scientists retool this microbe to produce life-saving drugs and clean fuel, they are discovering just how far the definition of life can be stretched.

Completing the Darwinian Revolution

Why Darwin Matters

A Radical New History of Life

Evolution and the Science of Creation

Evolution Impossible

Essays on Biology and Society

The Tangled Tree

A creationist-turned-scientist demonstrates the facts of evolution and exposes Intelligent Design's real agenda Science is on the defensive. Half of Americans reject the theory of evolution and "Intelligent Design" campaigns are gaining ground. Classroom by classroom, creationism is overthrowing biology. In Why Darwin Matters, bestselling author Michael Shermer explains how the newest brand of creationism appeals to our predisposition to look for a designer behind life's complexity. Shermer decodes the scientific evidence to show that evolution is not "just a theory" and illustrates how it achieves the design of life through the bottom-up process of natural selection. Shermer, once an evangelical Christian and a creationist, argues that Intelligent Design proponents are invoking a combination of bad science, political antipathy, and flawed theology. He refutes their pseudoscientific arguments and then demonstrates why conservatives and people of faith can and should embrace evolution. He then appraises the evolutionary questions that truly need to be settled, building a powerful argument for science itself. Cutting the politics away from the facts, Why Darwin Matters is an incisive examination of what is at stake in the debate over evolution.

In this book William A. Dembski brilliantly argues that intelligent design provides a crucial link between science and theology. This is a pivotal work from a thinker whom Phillip Johnson calls "one of the most important of the 'design' theorists."

A radical reappraisal of Charles Darwin from the bestselling author of Victoria: A Life. With the publication of On the Origin of Species, Charles Darwin—hailed as the man who "discovered evolution"—was propelled into the pantheon of great scientific thinkers, alongside Galileo, Copernicus, and Newton. Eminent writer A. N. Wilson challenges this long-held assumption. Contextualizing Darwin and his ideas, he offers a groundbreaking critical look at this revered figure in modern science. In this beautifully written, deeply erudite portrait, Wilson argues that Darwin was not an original scientific thinker, but a ruthless and determined self-promoter who did not credit the many great sages whose ideas he advanced in his book. Furthermore, Wilson contends that religion and Darwinism have much more in common than it would seem, for the acceptance of Darwin's theory involves a pretty significant leap of faith. Armed with an extraordinary

breadth of knowledge, Wilson explores how Darwin and his theory were very much a product of their place and time. The "Survival of the Fittest" was really the Survival of Middle Class families like the Darwins—members of a relatively new economic strata who benefited from the rising Industrial Revolution at the expense of the working classes. Following Darwin's theory, the wretched state of the poor was an outcome of nature, not the greed and neglect of the moneyed classes. In a paradigm-shifting conclusion, Wilson suggests that it remains to be seen, as this class dies out, whether the Darwinian idea will survive, or whether it, like other Victorian fads, will become a footnote in our intellectual history. Brilliant, daring, and ambitious, Charles Darwin explores this legendary man as never before, and challenges us to reconsider our understanding of both Darwin and modern science itself.

An authoritative exploration of why understanding evolution is crucial to human life today It is easy to think of evolution as something that happened long ago, or that occurs only in "nature," or that is so slow that its ongoing impact is virtually nonexistent when viewed from the perspective of a single human lifetime. But we now know that when natural selection is strong, evolutionary change can be very rapid. In this book, some of the world's leading scientists explore the implications of this reality for human life and society. With some twenty-three essays, this volume provides authoritative yet accessible explorations of why understanding evolution is crucial to human life—from dealing with climate change and ensuring our food supply, health, and economic survival to developing a richer and more accurate comprehension of society, culture, and even what it means to be human itself. Combining new essays with essays revised and updated from the acclaimed Princeton Guide to Evolution, this collection addresses the role of evolution in aging, cognition, cooperation, religion, the media, engineering, computer science, and many other areas. The result is a compelling and important book about how evolution matters to humans today. The contributors are Dan I. Andersson, Francisco J. Ayala, Amy Cavanaugh, Cameron R. Currie, Dieter Ebert, Andrew D. Ellington, Elizabeth Hannon, John Hawks, Paul Keim, Richard E. Lenski, Tim Lewens, Jonathan B. Losos, Virpi Lummaa, Jacob A. Moorad, Craig Moritz, Martha M. Muñoz, Mark Pagel, Talima Pearson, Robert T. Pennock, Daniel E. L. Promislow, Erik M. Quandt, David C. Queller, Robert C. Richardson, Eugenie C. Scott, H. Bradley Shaffer, Joan E. Strassmann, Alan R. Templeton, Paul E. Turner, and Carl Zimmer.

In Search of the Causes of Evolution

What Evolution Is

Why Evolution is True

The Annotated Origin

Redesigning the Future of Humanity--One Gene at a Time

The Surprising Science of Universal Ancestry

Science, Evolution, and Creationism

There is scientific evidence proving evolution cannot be responsible for life on Earth. It is time to question what biology text books and nature documentaries claim about our origins. Even Darwin admitted, "I threw out queries, suggestions, wondering all the time over everything; and to my astonishment the ideas took like wildfire. People made a religion of them." Dr. John Ashton has dedicated 40+ years to teaching and researching science, and exposing the lack of proven evidence for Darwin's theories. In *Evolution Impossible*, he uses discoveries in genetics, biochemistry, geology, radiometric dating, and other scientific disciplines to explain why the theory of evolution is a myth. Discover for yourself: Why the fossil record is evidence of extinction, not evolution How erosion and sedimentation dates conflict with radiometric dating How the lack of transitional fossils undermines evolutionary notions Why living cells and new organisms do not rise by chance or random mutations Regardless of your level of scientific education, you will finish this book able to cite 12 reasons why evolution cannot explain the origin of life.

Presents Darwin's masterwork on evolution with extensive annotations by an experienced field biologist.

It is widely understood that Charles Darwin's theory of evolution completely revolutionized the study of biology. Yet, according to David Sloan Wilson, the Darwinian revolution won't be truly complete until it is applied more broadly—to everything associated with the words "human," "culture," and "policy." In a series of engaging and insightful examples—from the breeding of hens to the timing of cataract surgeries to the organization of an automobile plant—Wilson shows how an evolutionary worldview provides a practical tool kit for understanding not only genetic evolution but also the fast-paced changes that are having an impact on our world and ourselves. What emerges is an incredibly empowering argument: If we can become wise managers of evolutionary processes, we can solve the problems of our age at all scales—from the efficacy of our groups to our well-being as individuals to our stewardship of the planet Earth.

The scientist who has been dubbed the "Father of Intelligent Design" and author of the groundbreaking book *Darwin's Black Box* contends that recent scientific discoveries further disprove Darwinism and strengthen the case for an intelligent creator. In his controversial bestseller *Darwin's Black Box*, biochemist Michael Behe challenged Darwin's theory of evolution, arguing that science itself has proven that intelligent design is a better explanation for the origin of life. In *Darwin Devolves*, Behe advances his argument, presenting new research that offers a startling reconsideration of how Darwin's mechanism works, weakening the theory's validity even more. A system of natural selection acting on random mutation, evolution can help make something look and act differently. But evolution never creates something organically. Behe contends that Darwinism actually works by a process of devolution—damaging cells in DNA in order to create something new at the lowest biological levels. This is important, he makes clear, because it shows the Darwinian process cannot explain the creation of life itself. "A process that so easily tears down sophisticated machinery is not one which will build complex, functional systems," he writes. In addition to disputing the methodology of Darwinism and how it conflicts with the concept of creation, Behe reveals that what makes Intelligent Design unique—and right—is that it acknowledges causation. Evolution proposes that organisms living today are descended with modification from organisms that lived in the distant past. But Intelligent Design goes a step further asking, what caused such astounding changes to take place? What is the reason or mechanism for evolution? For Behe, this is what makes Intelligent Design so important.

Intelligent Design

The Curious Reasons Why Our Bodies Work (Or Don't)

How Darwin's Forgotten Theory of Mate Choice Shapes the Animal World - and Us

Faith Versus Fact

Evolving Ourselves

The Evolution of Beauty

The Selfish Gene

Weaves together the many threads of modern work in genetics, palaeontology, geology, molecular biology, anatomy and development that demonstrate the processes first proposed by Darwin and to present them in a crisp, lucid, account accessible to a wide audience.

A FINALIST FOR THE PULITZER PRIZE NAMED A BEST BOOK OF THE YEAR BY THE NEW YORK TIMES BOOK REVIEW, SMITHSONIAN, AND WALL STREET JOURNAL A major reimagining of how evolutionary forces work, revealing how

mating preferences—what Darwin termed "the taste for the beautiful"—create the extraordinary range of ornament in the animal world. In the great halls of science, dogma holds that Darwin's theory of natural selection explains every branch on the tree of life: which species thrive, which wither away to extinction, and what features each evolves. But can adaptation by natural selection really account for everything we see in nature? Yale University ornithologist Richard Prum—reviving Darwin's own views—thinks not. Deep in tropical jungles around the world are birds with a dizzying array of appearances and mating displays: Club-winged Manakins who sing with their wings, Great Argus Pheasants who dazzle prospective mates with a four-foot-wide cone of feathers covered in golden 3D spheres, Red-capped Manakins who moonwalk. In thirty years of fieldwork, Prum has seen numerous display traits that seem disconnected from, if not outright contrary to, selection for individual survival. To explain this, he dusts off Darwin's long-neglected theory of sexual selection in which the act of choosing a mate for purely aesthetic reasons—for the mere pleasure of it—is an independent engine of evolutionary change. Mate choice can drive ornamental traits from the constraints of adaptive evolution, allowing them to grow ever more elaborate. It also sets the stakes for sexual conflict, in which the sexual autonomy of the female evolves in response to male sexual control. Most crucially, this framework provides important insights into the evolution of human sexuality, particularly the ways in which female preferences have changed male bodies, and even maleness itself, through evolutionary time. *The Evolution of Beauty* presents a unique scientific vision for how nature's splendor contributes to a more complete understanding of evolution and of ourselves.

For all the discussion in the media about creationism and 'Intelligent Design', virtually nothing has been said about the evidence in question - the evidence for evolution by natural selection. Yet, as this succinct and important book shows, that evidence is vast, varied, and magnificent, and drawn from many disparate fields of science. The very latest research is uncovering a stream of evidence revealing evolution in action - from the actual observation of a species splitting into two, to new fossil discoveries, to the deciphering of the evidence stored in our genome. *Why Evolution is True* weaves together the many threads of modern work in genetics, palaeontology, geology, molecular biology, anatomy, and development to demonstrate the 'indelible stamp' of the processes first proposed by Darwin. It is a crisp, lucid, and accessible statement that will leave no one with an open mind in any doubt about the truth of evolution.

James A. Shapiro proposes an important new paradigm for understanding biological evolution, the core organizing principle of biology. Shapiro introduces crucial new molecular evidence that tests the conventional scientific view of evolution based on the neo-Darwinian synthesis, shows why this view is inadequate to today's evidence, and presents a compelling alternative view of the evolutionary process that reflects the shift in life sciences towards a more information- and systems-based approach in *Evolution: A View from the 21st Century*. Shapiro integrates advances in symbiogenesis, epigenetics, and saltationism into a unified approach that views evolutionary change as an active cell process, regulated epigenetically and capable of making rapid large changes by horizontal DNA transfer, inter-specific hybridization, whole genome doubling, symbiogenesis, or massive genome restructuring. *Evolution* marshals extensive evidence in support of a fundamental reinterpretation of evolutionary processes, including more than 1,100 references to the scientific literature. Shapiro's work will generate extensive discussion throughout the biological community, and may significantly change your own thinking about how life has evolved. It also has major implications for evolutionary computation, information science, and the growing synthesis of the physical and biological sciences.

12 Reasons Why Evolution Cannot Explain the Origin of Life on Earth

Evolution Gone Wrong

This View of Life

How Evolutionists Have Led Us Astray

Charles Darwin

The Bridge Between Science Theology

Only a Theory

Everything you were taught about evolution is wrong.

Presents the many threads of modern work in genetics, paleontology, geology, molecular biology, and anatomy that demonstrate the indelible stamp of the evolutionary processes first proposed by Darwin.

Why Evolution Works (and Creationism Fails) is an impassioned argument in favor of science—primarily the theory of evolution—and against creationism.

Why impassioned? Should not scientists be dispassionate in their work? "Perhaps," write the authors, "but it is impossible to remain neutral when our most successful scientific theories are under attack, for religious and other reasons, by laypeople and even some scientists who willfully distort scientific findings and use them for their own purposes." Focusing on what other books omit, how science works and how pseudoscience works, Matt Young and Paul K.

Strode demonstrate the futility of "scientific" creationism. They debunk the notion of intelligent design and other arguments that show evolution could not have produced life in its present form. Concluding with a frank discussion of science and religion, *Why Evolution Works (and Creationism Fails)* argues that science by no means excludes religion, though it ought to cast doubt on certain religious claims that are contrary to known scientific fact.

Evaluates the debate between advocates for evolution and intelligent design which occurred during the 2005 Dover evolution trial, dissecting the claims of the intelligent design movement and explaining why the conflict is compromising America's position a

Microcosm

E. coli and the New Science of Life

Why Evolution Is True

From Field Observations to Mechanisms

A View from the 21st Century

Books do Furnish a Life

Jesus Loves You and Evolution Is True

Dawkins explains and argues how the theory of evolution by natural selection refutes the creationist watchmaker theory that posits a divine creator.

"A superbly argued book." —Richard Dawkins, author of The God Delusion The New York Times bestselling author of Why Evolution is True explains why any attempt to make religion compatible with science is doomed to fail In this provocative book, evolutionary

biologist Jerry A. Coyne lays out in clear, dispassionate detail why the toolkit of science, based on reason and empirical study, is reliable, while that of religion—including faith, dogma, and revelation—leads to incorrect, untestable, or conflicting conclusions. Coyne is responding to a national climate in which more than half of Americans don't believe in evolution, members of Congress deny global warming, and long-conquered childhood diseases are reappearing because of religious objections to inoculation, and he warns that religious prejudices in politics, education, medicine, and social policy are on the rise. Extending the bestselling works of Richard Dawkins, Daniel Dennett, and Christopher Hitchens, he demolishes the claims of religion to provide verifiable "truth" by subjecting those claims to the same tests we use to establish truth in science. Coyne irrefutably demonstrates the grave harm—to individuals and to our planet—in mistaking faith for fact in making the most important decisions about the world we live in. Praise for *Faith Versus Fact*: "A profound and lovely book . . . showing that the honest doubts of science are better . . . than the false certainties of religion." —Sam Harris, author of *The End of Faith*

The maestro storyteller and reporter provocatively argues that what we think we know about speech and human evolution is wrong. "A whooping, joy-filled and hyperbolic raid on, of all things, the theory of evolution." (Dwight Garner, *New York Times*) Tom Wolfe, whose legend began in journalism, takes us on an eye-opening journey that is sure to arouse widespread debate. *THE KINGDOM OF SPEECH* is a captivating, paradigm-shifting argument that speech—not evolution—is responsible for humanity's complex societies and achievements. From Alfred Russel Wallace, the Englishman who beat Darwin to the theory of natural selection but later renounced it, and through the controversial work of modern-day anthropologist Daniel Everett, who defies the current wisdom that language is hard-wired in humans, Wolfe examines the solemn, long-faced, laugh-out-loud zig-zags of Darwinism, old and Neo, and finds it irrelevant here in the Kingdom of Speech.

Evolutionary biology has witnessed breathtaking advances in recent years. Some of its most exciting insights have come from the crossover of disciplines as varied as paleontology, molecular biology, ecology, and genetics. This book brings together many of today's pioneers in evolutionary biology to describe the latest advances and explain why a cross-disciplinary and integrated approach to research questions is so essential. Contributors discuss the origins of biological diversity, mechanisms of evolutionary change at the molecular and developmental levels, morphology and behavior, and the ecology of adaptive radiations and speciation. They highlight the mutual dependence of organisms and their environments, and reveal the different strategies today's researchers are using in the field and laboratory to explore this interdependence. Peter and Rosemary Grant—renowned for their influential work on Darwin's finches in the Galápagos—provide concise introductions to each section and identify the key questions future research needs to address. In addition to the editors, the contributors are Myra Awoodey, Christopher N. Balakrishnan, Rowan D. H. Barrett, May R. Berenbaum, Paul M. Brakefield, Philip J. Currie, Scott V. Edwards, Douglas J. Emlen, Joshua B. Gross, Hopi E. Hoekstra, Richard Hudson, David Jablonski, David T. Johnston, Mathieu Joron, David Kingsley, Andrew H. Knoll, Mimi A. R. Koehl, June Y. Lee, Jonathan B. Losos, Isabel Santos Magalhaes, Albert B. Phillimore, Trevor Price, Dolph Schluter, Ole Seehausen, Clifford J. Tabin, John N. Thompson, and David B. Wake.

Why Evolution Works (and Creationism Fails)

The Evidence for Evolution

Undeniable

Evolution and the Battle for America's Soul

The New Science About DNA That Challenges Evolution

Why Youth Ministry Needs Science

Sometimes Deceived

Jerry Fodor and Massimo Piatelli-Palmarini, a distinguished philosopher and scientist working in tandem, reveal major flaws at the heart of Darwinian evolutionary theory. They do not deny Darwin's status as an outstanding scientist but question the inferences he drew from his observations. Combining the results of cutting-edge work in experimental biology with crystal-clear philosophical argument they mount a devastating critique of the central tenets of Darwin's account of the origin of species. The logic underlying natural selection is the survival of the fittest under changing environmental pressure. This logic, they argue, is mistaken. They back up the claim with evidence of what actually happens in nature. This is a rare achievement - the short book that is likely to make a great deal of difference to a very large subject. What Darwin Got Wrong will be controversial. The authors' arguments will reverberate through the scientific world. At the very least they will transform the debate about evolution.

New York Times Bestseller From the most celebrated heir to Darwin comes a groundbreaking book on evolution, the summa work of Edward O. Wilson's legendary career. Sparking vigorous debate in the sciences, *The Social Conquest of Earth* upends "the famous theory that evolution naturally encourages creatures to put family first" (Discover). Refashioning the story of human evolution, Wilson draws on his remarkable knowledge of biology and social behavior to demonstrate that group selection, not kin selection, is the premier driving force of human evolution. In a work that James D. Watson calls "a monumental exploration of the biological origins of the human condition," Wilson explains how our innate drive to belong to a group is both a "great blessing and a terrible curse" (Smithsonian). Demonstrating that the sources of morality, religion, and the creative arts are fundamentally biological in nature, the renowned Harvard University biologist presents us with the clearest explanation ever produced as to the origin of the human condition and why it resulted in our domination of the Earth's biosphere.

Donald R. Prothero's *Evolution* is an entertaining and rigorous history of the transitional forms and series found in the fossil record. Its engaging narrative of scientific discovery and well-grounded analysis has led to the book's widespread adoption in courses that teach the nature and value of fossil evidence

for evolution. Evolution tackles systematics and cladistics, rock dating, neo-Darwinism, and macroevolution. It includes extensive coverage of the primordial soup, invertebrate transitions, the development of the backbone, the reign of the dinosaurs, and the transformation from early hominid to modern human. The book also details the many alleged "missing links" in the fossil record, including some of the most recent discoveries that flesh out the fossil timeline and the evolutionary process. In this second edition, Prothero describes new transitional fossils from various periods, vividly depicting such bizarre creatures as the Odontochelys, or the "turtle on the half shell"; fossil snakes with legs; and the "Frogamander," a new example of amphibian transition. Prothero's discussion of intelligent design arguments includes more historical examples and careful examination of the "experiments" and observations that are exploited by creationists seeking to undermine sound science education. With new perspectives, Prothero reframes creationism as a case study in denialism and pseudoscience rather than a field with its own intellectual dynamism. The first edition was hailed as an exemplary exploration of the fossil evidence for evolution, and this second edition will be welcome in the libraries of scholars, teachers, and general readers who stand up for sound science in this post-truth era.

Science is not a danger to the faith of Christian youth. In fact, Sara Sybesma Tolsma, an award-winning scientist, and Jason Lief, a leading practical theologian, argue that youth ministry needs science to help young people explore their relationship to God and engage their world faithfully. Jesus Loves You and Evolution Is True invites the church and its leaders to open their minds and hearts to what science can tell us about our human lives and our connections to, and role in, our natural world. But it does not stop there: evolutionary science is theological, argues Lief and Tolsma, and so it must have a central place in the day-to-day work of youth ministry. If the church wants to help youth develop robust spiritual lives and prepare them for the challenges that life will bring them, pastors, faith leaders, and youth workers must not only engage science but embrace its lessons for the life and practice of Christian faith today.

The Case Against Reality: Why Evolution Hid the Truth from Our Eyes

The Social Conquest of Earth

Why the Evidence of Evolution Reveals a Universe Without Design

A Facsimile of the First Edition of On the Origin of Species

Victorian Mythmaker

The Blind Watchmaker

Teaching About Evolution and the Nature of Science

How did life evolve on Earth? The answer to this question can help us understand our past and prepare for our future. Although evolution provides credible and reliable answers, polls show that many people turn away from science, seeking other explanations with which they are more comfortable. In the book Science, Evolution, and Creationism, a group of experts assembled by the National Academy of Sciences and the Institute of Medicine explain the fundamental methods of science, document the overwhelming evidence in support of biological evolution, and evaluate the alternative perspectives offered by advocates of various kinds of creationism, including "intelligent design." The book explores the many fascinating inquiries being pursued that put the science of evolution to work in preventing and treating human disease, developing new agricultural products, and fostering industrial innovations. The book also presents the scientific and legal reasons for not teaching creationist ideas in public school science classes. Mindful of school board battles and recent court decisions, Science, Evolution, and Creationism shows that science and religion should be viewed as different ways of understanding the world rather than as frameworks that are in conflict with each other and that the evidence for evolution can be fully compatible with religious faith. For educators, students, teachers, community leaders, legislators, policy makers, and parents who seek to understand the basis of evolutionary science, this publication will be an essential resource.

'Richard Dawkins is a thunderously gifted science writer.' Sunday Times 'It may be a collection of shorter parts, but the book is in no sense Dawkins made simple. It amounts to a substantive whole which offers a unitary panoramic view across his entire intellectual life.' Spectator Including conversations with Neil DeGrasse Tyson, Steven Pinker, Matt Ridley and more, this is an essential guide to the most exciting ideas of our time and their proponents from our most brilliant science communicator. Books Do Furnish a Life is divided by theme, including celebrating nature, exploring humanity, and interrogating faith. For the first time, it brings together Richard Dawkins' forewords, afterwords and introductions to the work of some of the leading thinkers of our age - Carl Sagan, Lawrence Krauss, Jacob Bronowski, Lewis Wolpert - with a selection of his reviews to provide an electrifying celebration of science writing, both fiction and non-fiction. It is also a sparkling addition to Dawkins' own remarkable canon of work. Plenty of other scientists write well, but no one writes like Dawkins... here is Dawkins the teacher, the scholar, the polemicist, the joker, the aesthete, the poet, the satirist, the man of compassion as well as indignation, the slayer of superstition and, above all, the scientist. - Areo Magazine

An ethologist shows man to be a gene machine whose world is one of savage competition and deceit

At once a spirited defense of Darwinian explanations of biology and an elegant primer on evolution for the general reader, What Evolution Is poses the questions at the heart of evolutionary theory and considers how our improved understanding of evolution has affected the viewpoints and values of modern man. Science Masters Series

Why Science and Religion Are Incompatible

Evolution

An electrifying celebration of science writing

How Evolution Shapes Our Lives

What the Fossils Say and Why It Matters

The Kingdom of Speech

Darwin: The Indelible Stamp

Liberty University biology professor Daniel Howell explores the logic of Darwinism and the evidence for biological evolution. Dr. Howell concludes that evolution is not science but a creation myth for the atheist worldview. Evolution is derived entirely from inferences supported by conceptual facts and coherent truths rather than empirical data.

Today many school students are shielded from one of the most important concepts in modern science: evolution. In engaging and conversational style, *Teaching About Evolution and the Nature of Science* provides a well-structured framework for understanding and teaching evolution. Written for teachers, parents, and community officials as well as scientists and educators, this book describes how evolution reveals both the great diversity and similarity among the Earth's organisms; it explores how scientists approach the question of evolution; and it illustrates the nature of science as a way of knowing about the natural world. In addition, the book provides answers to frequently asked questions to help readers understand many of the issues and misconceptions about evolution. The book includes sample activities for teaching about evolution and the nature of science. For example, the book includes activities that investigate fossil footprints and population growth that teachers of science can use to introduce principles of evolution. Background information, materials, and step-by-step presentations are provided for each activity. In addition, this volume: Presents the evidence for evolution, including how evolution can be observed today. Explains the nature of science through a variety of examples. Describes how science differs from other human endeavors and why evolution is one of the best avenues for helping students understand this distinction. Answers frequently asked questions about evolution. *Teaching About Evolution and the Nature of Science* builds on the 1996 National Science Education Standards released by the National Research Council--and offers detailed guidance on how to evaluate and choose instructional materials that support the standards. Comprehensive and practical, this book brings one of today's educational challenges into focus in a balanced and reasoned discussion. It will be of special interest to teachers of science, school administrators, and interested members of the community.

In this New York Times bestseller and longlist nominee for the National Book Award, "our greatest living chronicler of the natural world" (*The New York Times*), David Quammen explains how recent discoveries in molecular biology affect our understanding of evolution and life's history. In the mid-1970s, scientists began using DNA sequences to reexamine the history of all life. Perhaps the most startling discovery to come out of this new field--the study of life's diversity and relatedness at the molecular level--is horizontal gene transfer (HGT), or the movement of genes across species lines. It turns out that HGT has been widespread and important; we now know that roughly eight percent of the human genome arrived sideways by viral infection--a type of HGT. In *The Tangled Tree*, "the grandest tale in biology...David Quammen presents the science--and the scientists involved--with patience, candor, and flair" (*Nature*). We learn about the major players, such as Carl Woese, the most important little-known biologist of the twentieth century; Lynn Margulis, the notorious maverick whose wild ideas about "mosaic" creatures proved to be true; and Tsutomu Wantanabe, who discovered that the scourge of antibiotic-resistant bacteria is a direct result of horizontal gene transfer, bringing the deep study of genome histories to bear on a global crisis in public health. "David Quammen proves to be an immensely well-informed guide to a complex story" (*The Wall Street Journal*). In *The Tangled Tree*, he explains how molecular studies of evolution have brought startling recognitions about the tangled tree of life--including where we humans fit upon it. Thanks to new technologies, we now have the ability to alter even our genetic composition--through sideways insertions, as nature has long been doing. "The Tangled Tree is a source of wonder...Quammen has written a deep and daring intellectual adventure" (*The Boston Globe*).

"An unforgettable journey through this twisted miracle of evolution we call 'our body.'" --Spike Carlsen, author of *A Walk Around the Block From blurry vision to crooked teeth, ACLs that tear at alarming rates and spines that seem to spend a lifetime falling apart, it's a curious thing that human beings have beaten the odds as a species. After all, we're the only survivors on our branch of the tree of life. The flaws in our makeup raise more than a few questions, and this detailed foray into the many twists and turns of our ancestral past includes no shortage of curiosity and humor to find the answers. Why is it that human mothers have such a life-endangering experience giving birth? Why are there entire medical specialties for teeth and feet? And why is it that human babies can't even hold their heads up, but horses are trotting around minutes after they're born? In this funny, wide-ranging and often surprising book, biologist Alex Bezzarides tells us just where we inherited our adaptable, achy, brilliant bodies in the process of evolution.*

The Genealogical Adam and Eve

Icons of Evolution

Darwin Devolves

What Darwin Got Wrong

Science or Myth? Why Much of What We Teach About Evolution Is Wrong

The Case Against Intelligent Design

An eye-opening, mind-bending exploration of how mankind is reshaping its genetic future, based on the viral TED Talk series "Will Our Kids Be a Different Species?" and "The Next Species of Human." Are you willing to engineer the DNA of your unborn children and grand-children to be healthier? Better looking? More intelligent? Why are rates of autism, asthma, and allergies exploding at an unprecedented pace? Why are humans living longer and having far fewer kids? Futurist Juan Enriquez and scientist Steve Gullans conduct a sweeping tour of how humans are changing the course of evolution for all species—sometimes intentionally, sometimes not. For example: "What if life forms are limited only by the bounds of our imagination? Are designer babies and pets, de-extinction, even entirely newspecies fair game?" As humans, animals, and plants become ever more resistant to disease and aging, what will become the leading causes of death? "Man-machine interfaces may allow humans to live much longer. What will happen when we transfer parts of our "selves" into clones, into stored cells and machines? Though these harbingers of change are deeply unsettling, the authors argue we are also in an epoch of tremendous opportunity. Future humans, perhaps a more diverse, resilient, gentler, and intelligent species, may become better caretakers of the planet—but only if we make the right choices now. Intelligent, provocative, and optimistic, *Evolving Ourselves* is the ultimate guide to the next phase of life on Earth. Chosen by *Nature* magazine as a Fall 2016 season highlight.

Revealing the mechanics of evolutionary theory, the scientist, engineer and inventor presents a compelling argument for the scientific unviability of creationism and insists that creationism's place in the science classroom is harmful not only to our children, but to the future of the greater world as well.

Can we trust our senses to tell us the truth? Challenging leading scientific theories that claim that our senses report back objective reality, cognitive scientist Donald Hoffman argues that while we should take our perceptions seriously, we should not take them literally. How can it be possible that the world we see is not objective reality? And how can our senses be useful if they are not communicating the truth? Hoffman grapples with these questions and more over the course of this eye-opening work. Ever since *Homo sapiens* has walked the earth, natural selection has favored perception that hides the truth and guides us toward useful action, shaping our senses to keep us alive and reproducing. We observe a speeding car and do not walk in front of it; we see mold growing on bread and do not eat it. These impressions, though, are not objective reality. Just like a file icon on a desktop screen is a useful symbol rather than a genuine representation of what a computer file looks like, the objects we see every day are merely icons, allowing us to navigate the world safely and with ease. The real-world implications for this discovery are huge. From examining why fashion designers create clothes that give the illusion of a more "attractive" body shape to studying how companies use color to elicit specific emotions in consumers, and even dismantling the very notion that spacetime is objective reality, *The Case Against Reality* dares us to question everything we thought we knew about the world we see.