

Human Evolution A Very Short Introduction Very Short Introductions

Explores the discovery, nature, and role of genes in evolution and development.

Fossils have been vital to our understanding of the formation of the earth and the origins of all life on it. However, their impact has not been limited to debates about geology and evolution: attempts to explain their existence has shaken religion at its very roots, and they have remained a subject of ceaseless fascination for people of all ages and backgrounds. In this delightful book, Keith Thomson provides a remarkably all-encompassing explanation of fossils as a phenomenon. How did Darwin use fossils to support his theory of evolution? What are 'living fossils'? What fossils will we leave behind for future generations to examine? Building on the scientific aspects, he places fossils in a very human context, highlighting their impact on philosophy and mythology, our concept of time, and today's popular culture. What quickly becomes obvious is that the discovery of fossils and the ways in which they have been interpreted over time makes for fascinating reading. From the black market to the Piltdown Man, and from mythological dragons to living dinosaurs, fossils hold a permanent place in the popular imagination. ABOUT THE SERIES: The Very Short Introductions series from Oxford University Press contains hundreds of titles in almost every subject area. These pocket-sized books are the perfect way to get ahead in a new subject quickly. Our expert authors combine facts, analysis, perspective, new ideas, and enthusiasm to make interesting and challenging topics highly readable.

Dan Lieberman has written an innovative, exhaustively researched and carefully argued book dealing with the evolution of the human head. In it he addresses three interrelated questions. First, why does the human head look the way it does? Second, why did these transformations occur? And third, how is something as complex and vital as the head so variable and evolvable? This book addresses these questions in three sections. The first set of chapters review how human and ape heads grow, both in terms of individual parts (organs and regions) and as an integrated whole. The second section reviews how the head performs its major functions: housing the brain, chewing, swallowing, breathing, vocalizing, thermoregulating, seeing, hearing, tasting, smelling, and balancing during locomotion. The final set of chapters review the fossil evidence for major transformations of the head during human evolution from the divergence of the human and ape lineages through the origins of Homo sapiens. These chapters use developmental and functional insights from the first two sections to speculate on the developmental and selective bases for these transformations.

Less than 450 years ago, all European scholars believed that the Earth was at the centre of a Universe that was at most a few million miles in extent, and that the planets, sun, and stars all rotated around this centre. Less than 250 years ago, they believed that the Universe was created essentially in its present state about 6000 years ago. Even less than 150 years ago, the view that living species were the result of special creation by God was still dominant. The recognition by Charles Darwin and Alfred Russel Wallace of the mechanism of evolution by natural selection has completely transformed our understanding of the living world, including our own origins. In this Very Short Introduction Brian and Deborah Charlesworth provide a clear and concise summary of the process of evolution by natural selection, and how natural selection gives rise to adaptations and eventually, over many generations, to new species. They introduce the central concepts of the field of evolutionary biology, as they have developed since Darwin and Wallace on the subject, over 140 years ago, and discuss some of the remaining questions regarding processes. They highlight the wide range of evidence for evolution, and the importance of an evolutionary understanding for instance in combating the rapid evolution of resistance by bacteria to antibiotics and of HIV to antiviral drugs. This reissue includes some key updates to the main text and a completely updated Further Reading section. ABOUT THE SERIES: The Very Short Introductions series from Oxford University Press contains hundreds of titles in almost every subject area. These pocket-sized books are the perfect way to get ahead in a new subject quickly. Our expert authors combine facts, analysis, perspective, new ideas, and enthusiasm to make interesting and challenging topics highly readable.

The Science of Human Evolution

Human Evolution for a Sustainable Future

A New Look at Human Evolution

Volume X: Comparative Phylogeography

How Children Invented Humanity

In the tradition of Guns, Germs, and Steel and Sapiens, a winner of the Royal Society Prize for Science Books shows how four tools enabled us humans to control the destiny of our species "A wondrous, visionary work." --Tim Flannery, scientist and author of the bestselling The Weather Makers What enabled us to go from simple stone tools to smartphones? How did bands of hunter-gatherers evolve into multinational empires? Readers of Sapiens will say a cognitive revolution -- a dramatic evolutionary change that altered our brains, turning primitive humans into modern ones -- caused a cultural explosion. In Transcendence, Gaia Vince argues instead that modern humans are the product of a nuanced coevolution of our genes, environment, and culture that goes back into deep time. She explains how, through four key elements -- fire, language, beauty, and time -- our species diverged from the evolutionary path of all other animals, unleashing a compounding process that launched us into the Space Age and beyond. Provocative and poetic, Transcendence shows how a primate took dominion over nature and turned itself into something marvelous.

Evolutionary science is critical to an understanding of integrated human biology and is increasingly recognised as a core discipline by medical and public health professionals. Advances in the field of genomics, epigenetics, developmental biology, and epidemiology have led to the growing realisation that incorporating evolutionary thinking is essential for medicine to achieve its full potential. This revised and updated second edition of the first comprehensive textbook of evolutionary medicine explains the principles of evolutionary biology from a medical perspective and focuses on how medicine and public health might utilise evolutionary thinking. It is written to be accessible to a broad range of readers, whether or not they have had formal exposure to evolutionary science. The general structure of the second edition remains unchanged, with the initial six chapters providing a summary of the evolutionary theory relevant to understanding human

health and disease, using examples specifically relevant to medicine. The second part of the book describes the application of evolutionary principles to understanding particular aspects of human medicine: in addition to updated chapters on reproduction, metabolism, and behaviour, there is an expanded chapter on our coexistence with micro-organisms and an entirely new chapter on cancer. The two parts are bridged by a chapter that details pathways by which evolutionary processes affect disease risk and symptoms, and how hypotheses in evolutionary medicine can be tested. The final two chapters of the volume are considerably expanded; they illustrate the application of evolutionary biology to medicine and public health, and consider the ethical and societal issues of an evolutionary perspective. A number of new clinical examples and historical illustrations are included. This second edition of a novel and popular textbook provides an updated resource for doctors and other health professionals, medical students and biomedical scientists, as well as anthropologists interested in human health, to gain a better understanding of the evolutionary processes underlying human health and disease.

This textbook provides a collection of case studies in paleoanthropology demonstrating the method and limitations of science. These cases introduce the reader to various problems and illustrate how they have been addressed historically. The various topics selected represent important corrections in the field, some critical breakthroughs, models of good reasoning and experimental design, and important ideas emerging from normal science.

The idea of a missing link between humanity and our animal ancestors predates evolution and popular science and actually has religious roots in the deist concept of the Great Chain of Being. Yet, the metaphor has lodged itself in the contemporary imagination, and new fossil discoveries are often hailed in headlines as revealing the elusive transitional step, the moment when we stopped being “animal” and started being “human.” In *The Accidental Species*, Henry Gee, longtime paleontology editor at *Nature*, takes aim at this misleading notion, arguing that it reflects a profound misunderstanding of how evolution works and, when applied to the evolution of our own species, supports mistaken ideas about our own place in the universe. Gee presents a robust and stark challenge to our tendency to see ourselves as the acme of creation. Far from being a quirk of religious fundamentalism, human exceptionalism, Gee argues, is an error that also infects scientific thought. Touring the many features of human beings that have recurrently been used to distinguish us from the rest of the animal world, Gee shows that our evolutionary outcome is one possibility among many, one that owes more to chance than to an organized progression to supremacy. He starts with bipedality, which he shows could have arisen entirely by accident, as a by-product of sexual selection, moves on to technology, large brain size, intelligence, language, and, finally, sentience. He reveals each of these attributes to be alive and well throughout the animal world—they are not, indeed, unique to our species. *The Accidental Species* combines Gee’s firsthand experience on the editorial side of many incredible paleontological findings with healthy skepticism and humor to create a book that aims to overturn popular thinking on human evolution—the key is not what’s missing, but how we’re linked.

Human Evolution: A Very Short Introduction

A Story of Us

Comparative Anatomy and Phylogeny of Primate Muscles and Human Evolution

The Accidental Species

Dante: A Very Short Introduction

Genes

A New Reality: Human Evolution for a Sustainable Future provides a startling, fresh new message of understanding, perspective and hope for today’s tense, rapid-fire, kaleidoscopic world. *A New Reality: Human Evolution for a Sustainable Future* provides a startling, fresh new message of understanding, perspective and hope for today’s tense, rapid-fire, kaleidoscopic, changing world. Drawn from the writings of visionary scientist Jonas Salk, who developed the polio vaccine, extended and developed by his son Jonathan, the message of the book is past and sheds light on tensions that besiege us and the currents of discord that are raging as these words are written. More importantly, it indicates a way forward out of our current predicament. Written by a world-famous doctor and folk hero, based on population data, rich in visual imagery, elegantly designed, and clearly written, *A New Reality* is unique in the marketplace. In one or two sittings, it is accessible to the general reader while at the same time being of essential value to policy makers and academics. Its brevity and simplicity of design belie the sophistication of its message. “We are at a point in the course of human social evolution when the demands of survival converge with the higher ideals of humankind and the well-being and flourishing of human society. It is up to us to see that we navigate this transition, adapting to and emerging in a new reality.” —*A New Reality* Our country is divided and polarized. This is a major threat throughout much of the world. Mass migrations are causing national and international tension. Population growth continues to increase, especially in the developing world. Controversy rages as to the use of fossil fuels versus the development of alternative forms of energy. Disagreement continues about climate change. Opposing currents of opinion exist as to how much we should help other areas in the world and how much to help ourselves. Basic values are in conflict. More than 40 years ago, Jonas Salk understood that we are at a unique point in the history of the human species. After centuries of increase, population growth has begun to slow and is trending toward equilibrium. This change is accompanied by an equally significant shift in human values—a shift from those based on unlimited availability of resources, unremitting growth, excess, independence, competition and short-term thinking to those based on limited resources, balance, interdependence, cooperation and long-term thinking. This momentous transition is the source of far-reaching tension and conflict. The way through this difficult era is to embrace a new moral basis and to focus on new values that will be of the greatest benefit to humankind. There is an urgency, however, and failure to adapt will result in disaster both for humanity and

whole. A New Reality delivers a message of both caution and hope. Readers across the social and political spectrum will find it a reasoned and balanced counterpoint to current social trends. Its elegant design and long-range perspective will appeal to general readers, policy makers, millennials, baby boomers, teachers, and students, filling a need in the marketplace for positivity and wisdom in otherwise bleak times.

This book challenges the assumption that morphological data are inherently unsuitable for phylogeny reconstruction, argues that both molecular and morphological phylogenies should play an equal role in systematics, and provides the most comprehensive review of the comparative anatomy, homologies and evolution of the head, neck, pectoral and upper limb muscles of primates. Chapters 1 and 2 provide an introduction to the main aims and methodology of the book. Chapters 3 and 4 and Appendices I and II present the data obtained from dissections of the head, neck, pectoral and upper limb muscles of representative members of all the major primate groups including modern humans, and compare these data with the information available in the literature. Appendices I and II provide detailed textual (attachments, innervation, function, variations and synonyms) and visual (high quality photographs) information about each muscle for the primate taxa included in the cladistic study of Chapter 3, thus providing the first comprehensive and up to date overview of the comparative anatomy of the head, neck, pectoral and upper limb muscles of primates. A parsimonious tree obtained from the cladistic analysis of 166 head, neck, pectoral and upper limb muscle characters in 18 primate genera, and in representatives of the Scandentia, Rodentia, is fully congruent with the evolutionary molecular tree of Primates, thus supporting the idea that muscle characters are particularly useful to infer phylogenies. The combination of materials provided in this book point out that modern humans have fewer head, neck, pectoral and upper limb muscles than most other living primates, but are consistent with the idea that facial and vocal communication and specialized thumb movements have probably played an important role in recent human evolution. This book will be of interest to primatologists, comparative anatomists, functional morphologists, zoologists, physical anthropologists, and systematists, as well as to medical students, physicians and researchers interested in understanding human evolution, homology and variations of the muscles of modern humans. Contains 132 color plates.

This ambitious book probes our biological past to discover the kinds of lives that human beings have imagined were worth living. Bellah's theory goes deep into cultural and genetic history to identify a range of capacities (communal dancing, storytelling, theorizing) whose emergence made religious development possible in the first millennium BCE.

Biodiversity-the genetic variety of life-is an exuberant product of the evolutionary past, a vast human-supportive resource (aesthetic, intellectual, and material) of the present, and a resource we cherish and preserve for the future. Two urgent challenges, and opportunities, for 21st-century science are to gain deeper insights into the evolutionary processes that foster biodiversity and to translate that understanding into workable solutions for the regional and global crises that biodiversity currently faces. A grasp of evolutionary principles and processes is important in many arenas as well, such as education, medicine, sociology, and other applied fields including agriculture, pharmacology, and biotechnology. The ramifications of evolutionary thought also extend into learned realms traditionally reserved for philosophy and religion. The central goal of the In the Light of Evolution (ILE) series is to promote the evolutionary sciences through state-of-the-art colloquia-in the series of Arthur M. Sackler colloquia sponsored by the National Academy of Sciences-and their published proceedings. Each installment explores evolutionary perspectives on a particular biological topic that is scientifically intriguing but also has special relevance to contemporary societal issues or challenges. This tenth and final edition of the In the Light of Evolution series focuses on recent developments in phylogeographic research and their relevance to past accomplishments and future research directions.

Principles of Evolutionary Medicine

A Very Short Introduction

Fossils: A Very Short Introduction

Evolution: A Very Short Introduction

Darwin: A Very Short Introduction

Human Evolution

Religious capacity is a highly elaborate, neurocognitive human trait that has a solid evolutionary foundation. This book uses a multidisciplinary approach to describe millions of years of biological innovations that eventually give rise to the modern trait and its varied expression in humanity's many religions. The authors present a scientific model and a central thesis that the brain organs, networks, and capacities that allowed humans to survive physically also gave our species the ability to create theologies, find sustenance in religious practice, and use religion to support the social group. Yet, the trait of religious capacity remains non-obligatory, like reading and mathematics. The individual can choose not to use it. The approach relies on research findings in nine disciplines, including the work of countless neuroscientists, paleoneurologists, archaeologists, cognitive scientists, and psychologists. This is a cutting-edge examination of the evolutionary origins of humanity's interaction with the supernatural. It will be of keen interest to academics working in Religious Studies, Neuroscience, Cognitive Science, Anthropology, Evolutionary Biology, and Psychology.

In this stunningly original book, Richard Wrangham argues that it was cooking that caused the extraordinary transformation of our ancestors from apelike beings to Homo erectus. At the heart of Catching Fire lies an explosive new idea: the habit of eating cooked rather than raw food permitted the digestive tract to shrink and the human brain to grow, helped structure human society, and created the male-female division of labour. As our ancestors adapted to using fire, humans emerged as "the cooking apes". Covering everything from food-labelling and overweight pets to raw-food faddists, Catching Fire offers a startlingly original argument about how we came to be the social, intelligent, and sexual species we are today. "This notion is surprising, fresh and, in the hands of Richard Wrangham, utterly persuasive ... Big, new ideas do not come along often in evolution these days, but this is one." -Matt Ridley, author of

Genome

*It's time for a story of human evolution that goes beyond describing "ape-men" and talks about what women and children were doing. In a few decades, a torrent of new evidence and ideas about human evolution has allowed scientists to piece together a more detailed understanding of what went on thousands and even millions of years ago. We now know much more about the problems our ancestors faced, the solutions they found, and the trade-offs they made. The drama of their experiences led to the humans we are today: an animal that relies on a complex culture. We are a species that can and does rapidly evolve cultural solutions as we face new problems, but the intricacies of our cultures mean that this often creates new challenges. Our species' unique capacity for culture began to evolve millions of years ago, but it only really took off in the last few hundred thousand years. This capacity allowed our ancestors to survive and raise their difficult children during times of extreme climate chaos. Understanding how this has evolved can help us understand the cultural change and diversity that we experience today. Lesley Newson and Peter Richerson, a husband-and-wife team based at the University of California, Davis, began their careers with training in biology. The two have spent years together and individually researching and collaborating with scholars from a wide range of disciplines to produce a deep history of humankind. In *A Story of Us*, they present this rich narrative and explain how the evolution of our genes relates to the evolution of our cultures. Newson and Richerson take readers through seven stages of human evolution, beginning seven million years ago with the apes that were the ancestors of humans and today's chimps and bonobos. The story ends in the present day and offers a glimpse into the future.*

*Kim Sterelny here builds on his original account of the evolutionary development and interaction of human culture and cooperation, which he first presented in *The Evolved Apprentice* (2012). Sterelny sees human evolution not as hinging on a single key innovation, but as emerging from a positive feedback loop caused by smaller divergences from other great apes, including bipedal locomotion, better causal and social reasoning, reproductive cooperation, and changes in diet and foraging style. He advances this argument in *The Pleistocene Social Contract* with four key claims about cooperation, culture, and their interaction in human evolution. First, he proposes a new model of the evolution of human cooperation. He suggests human cooperation began from a baseline that was probably similar to that of great apes, advancing about 1.8 million years ago to an initial phase of cooperative forging, in small mobile bands. Second, he then presents a novel account of the change in evolutionary dynamics of cooperation: from cooperation profits based on collective action and mutualism, to profits based on direct and indirect reciprocation over the course of the Pleistocene. Third, he addresses the question of normative regulation, or moral norms, for band-scale cooperation, and connects it to the stabilization of indirect reciprocation as a central aspect of forager cooperation. Fourth, he develops an account of the emergence of inequality that links inequality to intermediate levels of conflict and cooperation: a final phase of cooperation in largescale, hierarchical societies in the Holocene, beginning about 12,000 years ago. *The Pleistocene Social Contract* combines philosophy of biology with a reading of the archaeological and ethnographic record to present a new model of the evolution of human cooperation, cultural learning, and inequality.*

50 Great Myths of Human Evolution

A (Very) Short History of Life on Earth

Understanding Misconceptions about Our Origins

The Evolution of the Human Head

How We Became Sapiens

Getting it Right

"[A]n exuberant romp through evolution, like a modern-day Willy Wonka of genetic space. Gee's grand tour enthusiastically details the narrative underlying life's erratic and often whimsical exploration of biological form and function." –Adrian Woolfson, *The Washington Post* In the tradition of Richard Dawkins, Bill Bryson, and Simon Winchester—An entertaining and uniquely informed narration of Life's life story. In the beginning, Earth was an inhospitably alien place—in constant chemical flux, covered with churning seas, crafting its landscape through incessant volcanic eruptions. Amid all this tumult and disaster, life began. The earliest living things were no more than membranes stretched across microscopic gaps in rocks, where boiling hot jets of mineral-rich water gushed out from cracks in the ocean floor. Although these membranes were leaky, the environment within them became different from the raging maelstrom beyond. These havens of order slowly refined the generation of energy, using it to form membrane-bound bubbles that were mostly-faithful copies of their parents—a foamy lather of soap-bubble cells standing as tiny clenched fists, defiant against the lifeless world. Life on this planet has continued in much the same way for millennia, adapting to literally every conceivable setback that living organisms could encounter and thriving, from these humblest beginnings to the thrilling and unlikely story of ourselves. In *A (Very) Short History of Life on Earth*, Henry Gee zips through the last 4.6 billion years with infectious enthusiasm and intellectual rigor. Drawing on the very latest scientific understanding

and writing in a clear, accessible style, he tells an enlightening tale of survival and persistence that illuminates the delicate balance within which life has always existed.

The study of human evolution is advancing rapidly. Newly discovered fossil evidence is adding ever more pieces to the puzzle of our past, whilst revolutionary technological advances in the study of ancient DNA are completely reshaping theories of early human populations and migrations. In this Very Short Introduction Bernard Wood traces the history of paleoanthropology from its beginnings in the eighteenth century to the very latest fossil finds. In this new edition he discusses how Ancient DNA studies have revolutionized how we view the recent (post-550 ka) human evolution, and the process of speciation. The combination of ancient and modern human DNA has contributed to discoveries of new taxa, as well as the suggestion of 'ghost' taxa whose fossil records still remain to be discovered. Considering the contributions of related sciences such as paleoclimatology, geochronology, systematics, genetics, and developmental biology, Wood explores our latest understandings of our own evolution. ABOUT THE SERIES: The Very Short Introductions series from Oxford University Press contains hundreds of titles in almost every subject area. These pocket-sized books are the perfect way to get ahead in a new subject quickly. Our expert authors combine facts, analysis, perspective, new ideas, and enthusiasm to make interesting and challenging topics highly readable.

Resistance to malaria. Blue eyes. Lactose tolerance. What do all of these traits have in common? Every one of them has emerged in the last 10,000 years. Scientists have long believed that the "great leap forward" that occurred some 40,000 to 50,000 years ago in Europe marked end of significant biological evolution in humans. In this stunningly original account of our evolutionary history, top scholars Gregory Cochran and Henry Harpending reject this conventional wisdom and reveal that the human species has undergone a storm of genetic change much more recently. Human evolution in fact accelerated after civilization arose, they contend, and these ongoing changes have played a pivotal role in human history. They argue that biology explains the expansion of the Indo-Europeans, the European conquest of the Americas, and European Jews' rise to intellectual prominence. In each of these cases, the key was recent genetic change: adult milk tolerance in the early Indo-Europeans that allowed for a new way of life, increased disease resistance among the Europeans settling America, and new versions of neurological genes among European Jews. Ranging across subjects as diverse as human domestication, Neanderthal hybridization, and IQ tests, Cochran and Harpending's analysis demonstrates convincingly that human genetics have changed and can continue to change much more rapidly than scientists have previously believed. A provocative and fascinating new look at human evolution that turns conventional wisdom on its head, *The 10,000 Year Explosion* reveals the ongoing interplay between culture and biology in the making of the human race.

Wide-ranging and inclusive, this text provides an invaluable review of an expansive selection of topics in human evolution, variation and adaptability for professionals and students in biological anthropology, evolutionary biology, medical sciences and psychology. The chapters are organized around four broad themes, with sections devoted to phenotypic and genetic variation within and between human populations, reproductive physiology and behavior, growth and development, and human health from evolutionary and ecological perspectives. An introductory section provides readers with the historical, theoretical and methodological foundations needed to understand the more complex ideas presented later. Two hundred discussion questions provide starting points for class debate and assignments to test student understanding.

How Cooking Made Us Human

In the Light of Evolution

Evolution: a Very Short Introduction

Trails from the Past

The 10,000 Year Explosion

Behavioral Differences among Technological Primates

This book is about the crucial role of evolutionary biology in transforming our view of human origins and relation to the universe, and the impact of this idea on traditional philosophy and religion. It explains the most important basic findings and procedures in the area, and how it has developed since the first publications of Darwin and Wallace 150 years ago.

Less than 450 years ago, all European scholars believed that the earth was the centre of a universe that was at most a few million miles in extent, and that the planets, sun, and stars all rotated around this centre. Less than 250 years ago, they believed that the universe was created essentially in its present state about 6000 years ago. Less than 150 years ago, the special creation by God of living species was still dominant. The relentless application of the scientific method of inference from experiment and observation, without reference to religious, or governmental authority has completely transformed our view of our origins and relation to the universe, in less than 500 years. Few would dispute that this programme has been spectacularly successful, particularly in the twentieth century. This book is about the crucial role of evolutionary biology in transforming our view of human origins and relation to the universe, and the impact of this idea on traditional philosophy and religion. The purpose of this book is to introduce the general reader to some of the most important basic findings, concepts, and procedures of evolutionary biology, as it has developed since the first publications of Darwin and Wallace on the subject, over 140 years ago.

Evolution provides a unifying set of principals for the whole of biology; it also illuminates the relation of human beings to the universe and each other. In addition, many aspects of evolution have practical importance; for instance, the rapid evolution of resistance by bacteria to antibiotics and of HIV to antiviral drugs are pressing medical problems. ABOUT THE SERIES: The Very Short Introductions series from Oxford University Press contains hundreds of titles in almost every subject area. These pocket-sized books are the perfect way to get ahead in a new subject quickly. Our expert authors combine facts, analysis, perspective, new ideas, and enthusiasm to make interesting and challenging topics highly readable.

Was Darwin wrong when he traced our origins to Africa? The Real Planet of the Apes makes the explosive claim that it was in Europe, not Africa, where apes evolved the most important hallmarks of our human lineage. In this compelling and accessible book, David Begun, one of the world's leading paleoanthropologists, transports readers to an epoch in the remote past when the Earth was home to many migratory populations of ape species. Begun draws on the latest astonishing discoveries in the fossil record, as well as his own experiences conducting field expeditions, to offer a sweeping evolutionary history of great apes and humans. He tells the story of how one of the earliest members of our evolutionary group evolved from lemur-like monkeys in the primeval forests of Africa. Begun then vividly describes how, over the next ten million years, these hominoids expanded into Europe and Asia and evolved climbing and hanging adaptations, longer maturation times, and larger brains. As the climate deteriorated in Europe, these apes either died out or migrated south, reinvading the African continent and giving rise to the lineages of African great apes, and, ultimately, humans. Presenting startling new insights, The Real Planet of the Apes fundamentally alters our understanding of human origins.

The study of human evolution is advancing rapidly. New fossil evidence is adding ever more pieces to the puzzle of our past; the new science of ancient DNA is completely reshaping theories of early human populations and migrations. Bernard Wood traces the field of palaeoanthropology from its beginnings in the eighteenth century to the present.

Human Origins

Basics in Human Evolution

Culture and Cooperation in Human Evolution

The Human Evolution Coloring Book, 2e

The Emergence of Religion in Human Evolution

A Pocket History of Human Evolution

The completely revised Human Evolution Coloring Book Provides an authoritative, scientific background for understanding the origins of humanity Includes new discoveries and information essential for students of anthropology, primatology, paleontology, comparative anatomy, and genetics Brings together evidence from living primates, fossils, and molecular studies Explains the latest dating methods, including radioactive, paleomagnetic, and molecular clocks Surveys the world of living primates, their ecology, locomotion, diet, behavior, and life histories Clarifies the anatomical and behavioral similarities and differences between ourselves and our closest living relatives, the chimpanzee and the gorilla Resolves some long-standing mysteries about our relationship to the extinct Neanderthals

In this Very Short Introduction, Peter Hainsworth and David Robey take a different approach to Dante, by examining the main themes and issues that run through all of his work, ranging from autobiography, to understanding God and the order of the universe. In doing so, they highlight what has made Dante a vital point of reference for modern writers and readers, both inside and outside Italy. They emphasize the distinctive and dynamic interplay in Dante's writing between argument, ideas, and analysis on the one hand, and poetic imagination on the other. Dante was highly concerned with the political and intellectual issues of his time, demonstrated most powerfully in his notorious work, The Divine Comedy. Tracing the tension between the medieval and modern aspects, Hainsworth and Robey provide a clear insight into the meaning of this masterpiece of world literature. They highlight key figures and episodes in the poem, bringing out the originality and power of Dante's writing to help readers understand the problems that Dante wanted his audience to confront but often left up to the reader to resolve. ABOUT THE SERIES: The Very Short Introductions series from Oxford University Press contains hundreds of titles in almost every subject area. These pocket-sized books are the perfect way to get ahead in a new subject quickly. Our expert authors combine facts, analysis, perspective, new ideas, and enthusiasm to make interesting and challenging topics highly readable.

50 Great Myths of Human Evolution uses common misconceptions to explore basic theory and research in human evolution and strengthen critical thinking skills for lay readers and students. Examines intriguing—yet widely misunderstood—topics, from general ideas about evolution and human origins to the evolution of modern humans and recent trends in the field Describes what fossils, archaeology, and genetics can tell us about human origins Demonstrates the ways in which science adapts and changes over time to incorporate new evidence and better explanations Includes myths such as “Humans lived at the same time as dinosaurs;” “Lucy was so small because she was a child;” “Our ancestors have always made fire;” and “There is a strong relationship between brain size and intelligence” Comprised of stand-alone essays that are perfect for casual reading, as well as footnotes and references that allow readers to delve more deeply into topics

This book is intended as a comprehensive overview of hominid evolution, synthesising data and approaches from physical anthropology, genetics, archaeology, psychology and philosophy. Human evolution courses are now widespread and this book has the potential to satisfy the requirements of most, particularly at the advanced undergraduate and graduate level. It is based on a translation, albeit with substantial modification, of a successful Spanish language book.

Diseases and Human Evolution

A Brief History of Culture, Sex, War, and the Evolution of Us

Transcendence

The History of Life: A Very Short Introduction

What Bones And Genomes Tell Us About Ourselves

Religion in Human Evolution

This Very Short Introduction presents a succinct and accessible guide to the key episodes in the story of life on earth - from the very origins of life four million years ago to the extraordinary diversity of species around the globe today.

Human Evolution: A Very Short Introduction Oxford University Press

Darwin's theory that our ancestors were apes caused a furore in the scientific world and outside it when *The Origin of Species* was published in 1859. Arguments still rage about the implications of his evolutionary theory, and scepticism about the value of Darwin's contribution to knowledge is widespread. In this analysis of Darwin's major insights and arguments, Jonathan Howard reasserts the importance of Darwin's work for the development of modern biology. ABOUT THE SERIES: The Very Short Introductions series from Oxford University Press contains hundreds of titles in almost every subject area. These pocket-sized books are the perfect way to get ahead in a new subject quickly. Our expert authors combine facts, analysis, perspective, new ideas, and enthusiasm to make interesting and challenging topics highly readable.

This introduction traces the history of paleoanthropology from its beginnings in the 18th century to the latest fossil finds. It concentrates on the fossil evidence for human evolution, making reference to the relevant archaeological evidence when appropriate.

Stone Tools in Human Evolution

The Role of Development in Human Evolution

4.6 Billion Years in 12 Pithy Chapters

The Real Planet of the Apes

Human Evolutionary Biology

A New Story of Human Origins

Urgent interest in new diseases, such as the coronavirus, and the resurgence of older diseases like tuberculosis has fostered questions about the history of human infectious diseases. How did they evolve? Where did they originate? What natural factors have stalled the progression of diseases or made them possible? How does a microorganism become a pathogen? How have infectious diseases changed through time? What can we do to control their occurrence? ; Ethne Barnes offers answers to these questions, using information from history and medicine as well as from anthropology. She focuses on changes in the patterns of human behavior through cultural evolution and how they have affected the development of human diseases. ; Writing in a clear, lively style, Barnes offers general overviews of every variety of disease and their carriers, from insects and worms through rodent vectors to household pets and farm animals. She devotes whole chapters to major infectious diseases such as leprosy, syphilis, smallpox, and influenza. Other chapters concentrate on categories of diseases ("gut bugs," for example, including cholera, typhus, and salmonella). The final chapters cover diseases that have made headlines in recent years, among them mad cow disease, West Nile virus, and Lyme disease. ; In the tradition of Berton Roueché, Hans Zinsser, and Sherwin Nuland, Ethne Barnes answers questions you never knew you had about the germs that have threatened us throughout human history.

An exploration of how the evolution of behavioral differences between humans and other primates affected the archaeological stone tool evidence.

Describes how mapping the human genome has aided paleoanthropologists in their study of ancient bones used to explore human origins, from the earliest humans--bipedal apes--up to Martin Pickford's Millennium Man.

"Rutherford describes [The Book of Humans] as being about the paradox of how our evolutionary journey turned 'an otherwise average ape' into one capable of creating complex tools, art, music, science, and engineering. It's an intriguing question, one his book sets against descriptions of the infinitely amusing strategies and antics of a dizzying array of animals."—The New York Times Book Review Publisher's Note: The Book of Humans was previously published in hardcover as *Humanimal*. In this new evolutionary history, geneticist Adam Rutherford explores the profound paradox of the human animal. Looking for answers across the animal kingdom, he

finds that many things once considered exclusively human are not: We aren't the only species that "speaks," makes tools, or has sex outside of procreation. Seeing as our genome is 98 percent identical to a chimpanzee's, our DNA doesn't set us far apart, either. How, then, did we develop the most complex culture ever observed? The Book of Humans proves that we are animals indeed—and reveals how we truly are extraordinary.

The Cambridge Encyclopedia to Human Evolution

The Pleistocene Social Contract

A New Reality

How Civilization Accelerated Human Evolution

How Humans Evolved through Fire, Language, Beauty, and Time

The Book of Humans

Basics in Human Evolution offers a broad view of evolutionary biology and medicine. The book is written for a non-expert audience, providing accessible and convenient content that will appeal to numerous readers across the interdisciplinary field. From evolutionary theory, to cultural evolution, this book fills gaps in the readers' knowledge from various backgrounds and introduces them to thought leaders in human evolution research. Offers comprehensive coverage of the wide ranging field of human evolution Written for a non-expert audience, providing accessible and convenient content that will appeal to numerous readers across the interdisciplinary field Provides expertise from leading minds in the field Allows the reader the ability to gain exposure to various topics in one publication

Why aren't we more like other apes? How did we win the evolutionary race? Find out how "wise" Homo sapiens really are. Prehistory has never been more exciting: New discoveries are overturning long-held theories left and right. Stone tools in Australia date back 65,000 years—a time when, we once thought, the first Sapiens had barely left Africa. DNA sequencing has unearthed a new hominid group—the Denisovans—and confirmed that crossbreeding with them (and Neanderthals) made Homo sapiens who we are today. A Pocket History of Human Evolution brings us up-to-date on the exploits of all our ancient relatives. Paleoanthropologist Silvana Condemi and science journalist François Savatier consider what accelerated our evolution: Was it tools, our "large" brains, language, empathy, or something else entirely? And why are we the sole survivors among many early bipedal humans? Their conclusions reveal the various ways ancient humans live on today—from gossip as modern "grooming" to our gendered division of labor—and what the future might hold for our strange and unique species.

Infants and children are the often-ignored heroes when it comes to understanding human evolution. Evolutionary pressures acted upon the young of our ancestors more powerfully than on adults, and changes over the course of development in our ancestors were primarily responsible for the species and the people we have become. This book takes an evolutionary developmental perspective, emphasizing that developmental plasticity--the ability to change our physical and psychological selves early in life--is the creative force in evolution, with natural selection serving as a filter, eliminating novel developmental outcomes that did not benefit survival. This book is about becoming--of becoming human and of becoming mature adults. Bjorklund asks, "How can an understanding of human development help us better understand human evolution?" Then, turning the relation between evolution and development on its head, Bjorklund demonstrates how an understanding of our species' evolution can help us better understand current development and how to better rear successful and emotionally healthy children.

Misunderstandings of Human Evolution

Catching Fire