

Mean Genes From Sex To Money To Food Taming Our Primal Instincts

In the small "Fly Room" at Columbia University, T.H. Morgan and his students, A.H. Sturtevant, C.B. Bridges, and H.J. Muller, carried out the work that laid the foundations of modern, chromosomal genetics. The excitement of those times, when the whole field of genetics was being created, is captured in this book, written in 1965 by one of those present at the beginning. His account is one of the few authoritative, analytic works on the early history of genetics. This attractive reprint is accompanied by a website, <http://www.esp.org/books/sturt/history/> offering full-text versions of the key papers discussed in the book, including the world's first genetic map.

An assessment of human thought and behavior explores conundrums from the mind's ability to perceive three dimensions to the nature of consciousness, in an account that draws on beliefs in cognitive science and evolutionary biology.

"With . . . evidence from recent genetic and anthropological research, [Zuk] offers a dose of paleoreality." —Erin Wayman, *Science News*

We evolved to eat berries rather than bagels, to live in mud huts rather than condos, to sprint barefoot rather than play football—or did we? Are our bodies and brains truly at odds with modern life? Although it may seem as though we have barely had time to shed our hunter-gatherer legacy, biologist Marlene Zuk reveals that the story is not so simple. Popular theories about how our ancestors lived—and why we should emulate them—are often based on speculation, not scientific evidence. Armed with a razor-sharp wit and brilliant, eye-opening research, Zuk takes us to the cutting edge of biology to show that evolution can work much faster than was previously realized, meaning that we are not biologically the same as our caveman ancestors. Contrary to what the glossy magazines would have us believe, we do not enjoy potato chips because they crunch just like the insects our forebears snacked on. And women don't go into shoe-shopping frenzies because their prehistoric foremothers gathered resources for their clans. As Zuk compellingly argues, such beliefs incorrectly assume that we're stuck—finished evolving—and have been for tens of thousands of years. She draws on fascinating evidence that examines everything from adults' ability to drink milk to the texture of our ear wax to show that we've actually never stopped evolving. Our nostalgic visions of an ideal evolutionary past in which we ate, lived, and reproduced as we were "meant to" fail to recognize that we were never perfectly suited to our environment. Evolution is about change, and every organism is full of trade-offs. From debunking the caveman diet to unraveling gender stereotypes, Zuk delivers an engrossing analysis of widespread paleofantasies and the scientific evidence that undermines them, all the while broadening our understanding of our origins and what they can really tell us about our present and our future.

Why do we want—and why do we do—so many things that are bad for us? And how can we stop? In *Mean Genes* economist Terry Burnham and biologist Jay Phelan offer advice on how to conquer our own worst enemy—our survival-minded genes. Having evolved in a time of scarcity, when our ancestors struggled to survive in the wild, our genes are poorly adapted to the convenience of modern society. They compel us to overeat, spend our whole paycheck, and cheat on our spouses. But knowing how they work, Burnham and Phelan show that we can trick these "mean genes" into submission and cultivate behaviors that will help us lead better lives. A lively, humorous guide to our evolutionary heritage, *Mean Genes* illuminates how we can use an understanding of our biology to beat our instincts—before they beat us.

What We Can and Can't Learn about Sex from Animals

Sexual Selections

A Guide to Biology

Understanding Genetics

Gay, Straight, and the Reason why

X Inactivation and Sex Differences in Disease

From Sex To Money To Food: Taming Our Primal Instincts

There are three major myths of human nature: humans are divided into biological races; humans are naturally aggressive; and men and women are truly different in behavior, desires, and wiring. In an engaging and wide-ranging narrative, Agustín Fuentes counters these pervasive and pernicious myths about human behavior. Tackling misconceptions about what race, aggression, and sex really mean for humans, Fuentes incorporates an accessible understanding of culture, genetics, and evolution, requiring us to dispose of notions of "nature or nurture." Presenting scientific evidence from diverse fields—including anthropology, biology, and psychology—Fuentes devises a myth-busting toolkit to dismantle persistent fallacies about the validity of biological races, the innateness of aggression and violence, and the nature of monogamy and differences between the sexes. A final chapter plus an appendix provide a set of take-home points on how readers can myth-bust on their own. Accessible, compelling, and original, this book is a rich and nuanced account of how nature, culture, experience, and choice interact to influence human behavior.

An unparalleled exploration of the mysteries underlying women's sexuality that rivals the culture-shifting Kinsey Report, from two of America's leading research psychologists Do women have sex simply to reproduce or display their affection? When University of Texas at Austin clinical psychologist Cindy M. Meston and evolutionary psychologist David M. Buss joined forces to investigate the underlying sexual motivations of women, what they found astonished them. Through the voices of real women, Meston and Buss reveal the motivations that guide women's sexual decisions and explain the deep-seated psychology and biology that often unwittingly drive women's desires—sometimes in pursuit of health or pleasure, or sometimes for darker, disturbing reasons that a woman may not fully recognize. Drawing on more than a thousand intensive interviews conducted solely for the book, as well as their pioneering research on physiological response and evolutionary emotions, *Why Women Have Sex* uncovers an amazingly complex and

nuanced portrait of female sexuality. They delve into the use of sex as a defensive tactic against a mate's infidelity (protection), as a ploy to boost self-confidence (status), as a barter for gifts or household chores (resource acquisition), or as a cure for a migraine headache (medication). *Why Women Have Sex* stands as the richest and deepest psychological understanding of female sexuality yet achieved and promises to inform every woman's (and her partner's) awareness of her relationship to sex and her sexuality.

Breakthroughs in genetics present us with a promise and a predicament. The promise is that we will soon be able to treat and prevent a host of debilitating diseases. The predicament is that our newfound genetic knowledge may enable us to manipulate our nature—to enhance our genetic traits and those of our children. Although most people find at least some forms of genetic engineering disquieting, it is not easy to articulate why. What is wrong with re-engineering our nature? *The Case against Perfection* explores these and other moral quandaries connected with the quest to perfect ourselves and our children. Michael Sandel argues that the pursuit of perfection is flawed for reasons that go beyond safety and fairness. The drive to enhance human nature through genetic technologies is objectionable because it represents a bid for mastery and dominion that fails to appreciate the gifted character of human powers and achievements. Carrying us beyond familiar terms of political discourse, this book contends that the genetic revolution will change the way philosophers discuss ethics and will force spiritual questions back onto the political agenda. In order to grapple with the ethics of enhancement, we need to confront questions largely lost from view in the modern world. Since these questions verge on theology, modern philosophers and political theorists tend to shrink from them. But our new powers of biotechnology make these questions unavoidable. Addressing them is the task of this book, by one of America's preeminent moral and political thinkers.

Women can be described as genetic mosaics because they have two distinctly different types of cells throughout their bodies. Unlike males, who have one X chromosome (inherited from their mother), females have two X chromosomes in every cell (one from each parent). The fathers copy works in some cells, while the mothers copy works in others. These two X chromosomes often function differently, especially if one carries a defective gene. Much has been written about the Y chromosome and its role in inducing maleness. This will be the first book about the X chromosome as a key to female development and the role of X-related factors in the etiology of sex differences in human disease. Barbara Migeon, from the renowned McKusick-Nathan Institute at Johns Hopkins, is a major figure in clinical genetics and is eminently qualified to write this book, and she writes clearly and effectively. She describes both the underlying molecular mechanisms and the remarkable genetic consequences of X inactivation and its role in determining the biological concepts characteristic of women. *Females are Mosaics* will be valuable to geneticists, biologists, and all health professionals interested in women's health.

The Genetic Gods

The End of Sex and the Future of Human Reproduction

The Autobiography of a Species in 23 Chapters

How the Mind Works

Genome

Sex, Genes & Rock 'n' Roll

Middlesex

A provocative and timely case for how the science of genetics can help create a more just and equal society In recent years, scientists like Kathryn Paige Harden have shown that DNA makes us different, in our personalities and in our health—and in ways that matter for educational and economic success in our current society. In *The Genetic Lottery*, Harden introduces readers to the latest genetic science, dismantling dangerous ideas about racial superiority and challenging us to grapple with what equality really means in a world where people are born different. Weaving together personal stories with scientific evidence, Harden shows why our refusal to recognize the power of DNA perpetuates the myth of meritocracy, and argues that we must acknowledge the role of genetic luck if we are ever to create a fair society. Reclaiming genetic science from the legacy of eugenics, this groundbreaking book offers a bold new vision of society where everyone thrives, regardless of how one fares in the genetic lottery.

"Heterosexuality," assumed to denote a universal sexual and cultural norm, has been largely exempt from critical scrutiny. In this boldly original work, Jonathan Ned Katz challenges the common notion that the distinction between heterosexuality and homosexuality has been a timeless one. Building on the history of medical terminology, he reveals that as late as 1923, the term "heterosexuality" referred to a "morbid sexual passion," and that its current usage emerged to legitimate men and women having sex for pleasure. Drawing on the works of Sigmund Freud, James Baldwin, Betty Friedan, and Michel Foucault, *The Invention of Heterosexuality* considers the effects of heterosexuality's recently forged primacy on both scientific literature and popular culture. "Lively and provocative."—Carol Tavis, *New York Times Book Review* "A valuable primer . . . misses no significant twists in sexual politics."—Gary Indiana, *Village Voice Literary Supplement* "One of the most important—if not outright subversive—works to emerge from gay and lesbian studies in years."—Mark Thompson, *The Advocate*

Explains the genetic role behind "modern" problems such as thrill-seeking, infidelity, eating disorders, and addiction.

All people are equal but, as *Human Diversity* explores, all groups of people are not the same -- a fascinating investigation of the genetics and neuroscience of human differences. The thesis of *Human Diversity* is that advances in genetics and neuroscience are overthrowing an intellectual orthodoxy that has ruled the social sciences for decades. The core of the orthodoxy consists of three dogmas: - Gender is a social construct. - Race is a social construct. - Class is a function of privilege. The problem is that all three dogmas are half-truths. They have stifled progress in understanding the rich texture that biology adds to our understanding of the social, political, and economic worlds we live in. It is not a story to be feared. "There are no monsters in the closet," Murray writes, "no dread doors we must fear opening." But it is a story that needs telling. *Human Diversity* does so without sensationalism, drawing on the most authoritative scientific findings, celebrating both our many differences and our common humanity.

The Role of Genes in Human Behavior

The Gene

Volume X: Comparative Phylogeography

The Prehistoric Origins of Modern Sexuality

On the Genetic Superiority of Women

Mitochondria and the meaning of life

Exploring the Biological Contributions to Human Health

They mastermind our lives, shaping our features, our health, and our behavior, even in the sacrosanct realms of love and sex, religion, aging, and death. Yet we are the ones who house, perpetuate, and give the promise of immortality to these biological agents, our genetic gods. The link between genes and gods is hardly arbitrary, as the distinguished evolutionary geneticist John Avise reveals in this compelling book. In clear, straightforward terms, Avise reviews recent discoveries in molecular biology, evolutionary genetics, and human genetic engineering, and discusses the relevance of these findings to issues of ultimate concern traditionally reserved for mythology, theology, and religious faith. The book explains how the genetic gods figure in our development--not just our metabolism and physiology, but even our emotional disposition, personality, ethical leanings, and, indeed, religiosity. Yet genes are physical rather than metaphysical entities. Having arisen via an amoral evolutionary process--natural selection--genes have no consciousness, no sentient code of conduct, no reflective concern about the consequences of their actions. It is Avise's contention that current genetic knowledge can inform our attempts to answer typically religious questions--about origins, fate, and meaning. The Genetic Gods challenges us to make the necessary connection between what we know, what we believe, and what we embody. Table of Contents: Preface Prologue 1. The Doctrines of Biological Science 2. Geneses 3. Genetic Maladies 4. Genetic Beneficence 5. Strategies of the Genes 6. Genetic Sovereignty 7. New Lords of Our Genes? 8. Meaning Epilogue Notes Glossary Index

Reviews of this book: Our genes, [Avise] says, are responsible not only for how we got here and exist day to day, but also for the core of our being--our personalities and morals. It is our genetic make-up that allows for and formulates our religious belief systems, he argues. Avise does not eschew spirituality but seeks a more informed, less confrontational approach between science and the pulpit. --Science News

Reviews of this book: For the general scientific reader, the book is an excellent distillation of a broad and increasingly important field, a course of causation that cannot be ignored. From advising expectant parents to getting innocent people off death row, genetics increasingly dominates our lives. The sections on genetics are expertly written, particularly for those readers without in-depth knowledge. The author explains slowly and carefully just how genetics operates, using multiple metaphors. His genetic discourse proceeds in a neighborly fashion, as one might tell stories while sitting in a rocking chair at a country store. He seems to be invigorated by genes and just can't wait to tell about them. --David W. Hodo, Journal of the American Medical Association

Reviews of this book: As a whole, this book is quite informative and stimulating, and sections of it are beautifully written. Indeed, Professor Avise has a real gift for prose and scientific expositions, and I would suspect that he must be a formidable lecturer...At its core, [The Genetic Gods] is a survey, and a very nice one at that, of evolutionary genetics, the field of the author's major research interests. There is a strong sociobiological cast to the arguments, and the work and ideas of E. O. Wilson figure prominently. The presentation of evolutionary genetics is imbedded in a more general discussion of modern human and molecular genetics...However, this book is, most of all, a philosophical treatise that attempts, admittedly with the bias of a biologist, to examine the intersection of the fundamental premises of evolution and religion. Professor Avise has given us plenty to think about in this book [and]...it was a real pleasure to wrestle with the ideas he was presenting. I would suggest that other readers give it a try. --Charles J. Epstein, Trends in Genetics

Reviews of this book: [Avise's] account of the role genes play in shaping the human condition is wholly involving, paying particular attention to issues of reproduction, aging and death. In addition to presenting ample biological information in a form accessible to the nonspecialist, Avise does a superb job of discussing many of the ethical implications that have arisen from our growing knowledge of human genetics. Just a few of the topics covered are genetic engineering, the patenting of life, genetic screening, abortion, human cloning, gene therapy and insurance-related controversies. --Publishers Weekly

Reviews of this book: Avise explains thoroughly how evolution operates on a genetic level. His goal is to show that humans can look to this information as a way to answer fundamental questions of life instead of looking to traditional religious beliefs...Avise includes some very interesting discussions of ethical concerns related to genetic issues. --Eric D. Albright, Library Journal

This is a splendid account of a subject that affects us all: the breathtaking increase in understanding of human genetics and the insight it provides into human evolution. John Avise speaks with authority of molecular evolutionary genetics and with affecting compassion of what it might mean. --Douglas J. Futuyma, State University of New York at Stony Brook

The Genetic Gods is many things. It is a wonderful introduction to modern molecular biology, by a man who knows his subject backwards. It is a stimulating account of the ways in which genetics impinges on human nature--our thinking and our behavior. It is a remarkably level-headed and sympathetic account of the implications of our new findings for traditional and not-so-traditional issues in philosophy and religion. In an age of genetic counseling, cloning, construction of new life forms, the book is worth its weight in gold for this alone. But most of all, it is a huge amount of fun to read--you want to applaud or argue with the author on nigh every page. Highly recommended! --Michael Ruse, University of Guelph

The Genetic Gods makes a valuable contribution to the on-going task of sorting out the implications of evolutionary biology and genetics for human self-understanding. Avise addresses, with authority and grace, the most consequential intellectual issues of our time. A challenging and insightful book. --Loyal Rue, Harvard University

A wonderfully informative and engaging book. Avise offers a lucid, accessible primer on our genes, angelic and demonic, and examines religious and ethical issues, all too human, now confronted by genetic science. He makes a compelling case that anyone seeking to 'Know Thyself' should study the DNA molecular scriptures, our most ancient and universal legacy. --Dudley Herschbach, Harvard University, Nobel Laureate in Chemistry

Examines the importance of cooperation in human beings and in nature, arguing that this social tool is as an important aspect of evolution as mutation and natural selection.

It's obvious why only men develop prostate cancer and why only women get ovarian cancer. But it is not obvious why women are more likely to recover language ability after a stroke than men or why women are more apt to develop autoimmune diseases such as lupus. Sex differences in health throughout the lifespan have been documented. Exploring the Biological Contributions to Human Health begins to snap the pieces of the puzzle into place so that this knowledge can be used to improve health for both sexes. From behavior and cognition to metabolism and response to chemicals and infectious organisms, this book explores the health impact of sex (being male or female, according to reproductive organs and chromosomes) and gender (one's sense of self as male or female in society). Exploring the Biological Contributions to Human Health discusses basic biochemical differences in the cells of males and females and health variability between the sexes from conception throughout life. The book identifies key research needs and opportunities and addresses barriers to research. Exploring the Biological Contributions to Human Health will be important to health policy makers, basic, applied, and clinical researchers, educators, providers, and journalists-while being very accessible to interested lay readers.

A tour of evolution's most inventive—and essential—creations: animal genitalia Forget opposable thumbs and canine teeth: the largest anatomical differences between humans and chimps are found below the belt. In Nature's Nether Regions, ecologist and evolutionary biologist Menno Schilthuizen invites readers to discover the wondrous diversity of animalian reproductive organs. Schilthuizen packs this delightful read with astonishing scientific insights while maintaining an absorbing narrative style reminiscent of Mary Roach and Jerry Coyne. With illustrations throughout and vivid field anecdotes—among them laser surgery on a fruit fly's privates and a snail orgy—Nature's Nether Regions is a celebration of life in all shapes and sizes.

Power, Sex, Suicide

Paleofantasy: What Evolution Really Tells Us about Sex, Diet, and How We Live

In the Light of Evolution

evolution and belief in human affairs

The Riddles of Culture

The Moral Animal

The Invention of Heterosexuality

What causes a child to grow up gay or straight? In this book, neuroscientist Simon LeVay summarizes a wealth of scientific evidence that points to one inescapable conclusion: Sexual orientation results primarily from an interaction between genes, hormones, and the cells of the developing body and brain. LeVay helped create this field in 1991 with a much-publicized study in Science, where he reported on a difference in the brain structure between gay and straight men. Since then, an entire scientific discipline has sprung up around the quest for a biological explanation of sexual orientation. In this book, LeVay provides a clear explanation of where the science stands today, taking the reader on a whirlwind tour of laboratories that specialize in genetic endocrinology, neuroscience, cognitive psychology, evolutionary psychology, and family demographics. He describes, for instance, how researchers have manipulated the sex hormone levels of animals during development, causing them to mate preferentially with animals of their own gender. LeVay also reports on the prevalence of homosexual behavior among wild animals ranging from Graylag geese to the Bonobo chimpanzee. In this revised edition LeVay broadens his horizons. He adds a new chapter on bisexuality, reviews some uncommon forms of sexuality such as asexuality and pedophilia, and considers whether there could be a biological basis for subtypes of gay people such as "butch" and "femme" lesbians. Although many details remain unresolved, the general conclusion is quite clear: A person's sexual orientation arises in large part from biological processes that are already underway before birth.

Spanning eight decades and chronicling the wild ride of a Greek-American family through the vicissitudes of the twentieth century, Jeffrey Eugenides' witty, exuberant novel on one level tells a traditional story about three generations of a fantastic, absurdly lovable immigrant family -- blessed and cursed with generous doses of tragedy and high comedy. But there's a provocative twist: Callie, the narrator -- also Callie -- is a hermaphrodite. And the explanation for this takes us spooling back in time, through a breathtaking review of the twentieth century, to 1922, when the Turks sacked Smyrna and Callie's grandparents fled for Turkey. Back to a tiny village in Asia Minor where two lovers, and one rare genetic mutation, set our narrator's life in motion. Mido is a grand, utterly original fable of crossed bloodlines, the intricacies of gender, and the deep, untidy promptings of desire. It's a brilliant exploration of divided people, divided families, divided cities and nations -- the connected halves that make up ourselves and our world.

A Guardian Book of the Week Longlisted for the PEN / E. O. Wilson Literary Science Writing Award An award-winning physician and scientist makes the game-changing case that genetic females are stronger than males at every stage of life Here are the facts: Women live longer than men. They have stronger immune systems. They're better at fighting cancer and surviving falls and even see the world in a wider variety of colors. They are simply stronger than men at every stage of life. Why is this? Why are we taught the opposite? To find out, Dr. Sharon Moalem drew on his own medical experiences - treating premature babies in the neonatal intensive care unit; recruiting the elderly for neurogenetic studies; tending to HIV-positive orphans in Thailand; and tried to understand why in every instance men were consistently less likely to thrive. The answer, he discovered, lies in our genetics: two X chromosomes offer a powerful survival advantage. With clear, captivating prose that weaves together eye-opening research, case studies, diverse examples ranging from the behavior of honeybees to American pioneers, as well as experiences from his personal life and his own patients, Moalem explains why genetic females triumph over males when it comes to resilience, intellect, stamina, immunity and much more. He also calls for a reconsideration of our male-centric, one-size-fits-all view of medicine, medical studies and even how we prescribe medications - a view that still sees women through the lens of men. Revolutionary yet utterly convincing, The Better Half will make you see humanity and the survival of our species anew.

The #1 NEW YORK TIMES Bestseller The basis for the PBS Ken Burns Documentary The Gene: An Intimate History Now

includes an excerpt from Siddhartha Mukherjee's new book *Song of the Cell!* From the Pulitzer Prize-winning author of *The Emperor of All Maladies*—a fascinating history of the gene and “a magisterial account of how human minds have laboriously ingeniously picked apart what makes us tick” (Elle). “Sid Mukherjee has the uncanny ability to bring together science, history, the future in a way that is understandable and riveting, guiding us through both time and the mystery of life itself.” —Ken
Siddhartha Mukherjee dazzled readers with his Pulitzer Prize-winning *The Emperor of All Maladies* in 2010. That achievement is evidently just a warm-up for his virtuoso performance in *The Gene: An Intimate History*, in which he braids science, history, and memoir into an epic with all the range and biblical thunder of *Paradise Lost*” (The New York Times). In this biography Mukherjee brings to life the quest to understand human heredity and its surprising influence on our lives, personalities, identities, fates, and choices. “Mukherjee expresses abstract intellectual ideas through emotional stories...[and] swaddles his medical rigor with rhapsodic tenderness, surprising vulnerability, and occasional flashes of pure poetry” (The Washington Post). Throughout, the story of Mukherjee's own family—with its tragic and bewildering history of mental illness—reminds us of the questions that arise over our ability to translate the science of genetics from the laboratory to the real world. In riveting and dramatic prose, he describes the centuries of research and experimentation—from Aristotle and Pythagoras to Mendel and Darwin, from Boerhaave and Morgan to Crick, Watson and Franklin, all the way through the revolutionary twenty-first century innovators who mapped the human genome. “A fascinating and often sobering history of how humans came to understand the roles of genes in making who we are—and what our manipulation of those genes might mean for our future” (Milwaukee Journal-Sentinel), *The Gene* is a revelatory and magisterial history of a scientific idea coming to life, the most crucial science of our time, intimately explained by a master. “The Gene is a book we all should read” (USA TODAY).

Dirty Genes

The Mating Mind

The Genetic Lottery

The Science of Sexual Orientation

SuperCooperators

Human Diversity

Nature's Nether Regions

Short, sassy, and bold, Mean Genes uses a Darwinian lens to examine the issues that most deeply affect our lives: body image, money, addiction, violence, and the endless search for happiness, love, and fidelity. But Burnham and Phelan don't simply describe the connections between our genes and our behavior; they also outline steps that we can take to tame our primal instincts and so improve the quality of our lives. Why do we want (and do) so many things that are bad for us? We vow to lose those extra five pounds, put more money in the bank, and mend neglected relationships, but our attempts often end in failure. Mean Genes reveals that struggles for self-improvement are, in fact, battles against our own genes -- genes that helped our cavewoman and caveman ancestors flourish but that are selfish and out of place in the modern world. Why do we like junk food more than fruit? Why is the road to romance so rocky? Why is happiness so elusive? What drives us into debt? An investigation into the biological nature of temptation and the struggle for control, Mean Genes answers these and other fundamental questions about human nature while giving us an edge to lead more satisfying lives. One of America's leading anthropologists offers solutions to the perplexing question of why people behave the way they do. Why do Hindus worship cows? Why do Jews and Moslems refuse to eat pork? Why did so many people in post-medieval Europe believe in witches? Marvin Harris answers these and other perplexing questions about human behavior, showing that no matter how bizarre a people's behavior may seem, it always stems from identifiable and intelligible sources.

“Ridley leaps from chromosome to chromosome in a handy summation of our ever increasing understanding of the roles that genes play in disease, behavior, sexual differences, and even intelligence. . . . He addresses not only the ethical quandaries faced by contemporary scientists but the reductionist danger in equating inheritability with inevitability.” — The New Yorker *The genome's been mapped. But what does it mean? Matt Ridley's Genome is the book that explains it all: what it is, how it works, and what it portends for the future* Arguably the most significant scientific discovery of the new century, the mapping of the twenty-three pairs of chromosomes that make up the human genome raises almost as many questions as it answers. Questions that will profoundly impact the way we think about disease, about longevity, and about free will. Questions that will affect the rest of your life. *Genome* offers extraordinary insight into the ramifications of this incredible breakthrough. By picking one newly discovered gene from each pair of chromosomes and telling its story, Matt Ridley recounts the history of our species and its ancestors from the dawn of life to the brink of future medicine. From Huntington's disease to cancer, from the applications of gene therapy to the horrors of eugenics, Ridley probes the scientific, philosophical, and moral issues arising as a result of the mapping of the genome. It will help you understand what this scientific milestone means for you, for your children, and for humankind.

A study on evolutionary psychology implements Darwinian theory that identifies the inherent nature of such areas as human sexuality, sibling rivalry, self-esteem, friendship, and more. Reprint. 35,000 first printing.

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

What is Life?

Are We Hardwired?

Understanding Sexual Motivations from Adventure to Revenge (and Everything in Between)

Evolutionary Psychology and Everyday Life

A History of Genetics

Mean Genes

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 rich legacy to 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 biotic diversity, 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 other societal 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.

Instant National Bestseller After suffering for years with unexplainable health issues, Dr. Ben Lynch discovered the root cause—"dirty" genes. Genes can be "born dirty" or merely "act dirty" in response to your environment, diet, or lifestyle—causing lifelong, life-threatening, and chronic health problems, including cardiovascular disease, autoimmune disorders, anxiety, depression, digestive issues, obesity, cancer, and diabetes. Based on his own experience and successfully helping thousands of clients, Dr. Lynch shows you how to identify and optimize both types of dirty genes by cleaning them up with targeted and personalized plans, including healthy eating, good sleep, stress relief, environmental detox, and other holistic and natural means. Many of us believe our genes doom us to the disorders that run in our families. But Dr. Lynch reveals that with the right plan in place, you can eliminate symptoms, and optimize your physical and mental health—and ultimately rewrite your genetic destiny.

Developed from celebrated Harvard statistics lectures, Introduction to Probability provides essential language and tools for understanding statistics, randomness, and uncertainty. The book explores a wide variety of applications and examples, ranging from coincidences and paradoxes to Google PageRank and Markov chain Monte Carlo (MCMC). Additional

Mean Genes From Sex To Money To Food: Taming Our Primal Instincts Westview Publishing

The Selfish Gene

How Sexual Choice Shaped the Evolution of Human Nature

What Is Life? + Launchpad, 6-month Access

Busting Myths about Human Nature

Cows, Pigs, Wars, and Witches

A Breakthrough Program to Treat the Root Cause of Illness and Optimize Your Health

Delusions of Gender: How Our Minds, Society, and Neurosexism Create Difference

Mitochondria are tiny structures located inside our cells that carry out the essential task of producing energy for the cell. They are found in all complex living things, and in that sense, they are fundamental for driving complex life on the planet. But there is much more to them than that. Mitochondria have their own DNA, with their own small collection of genes, separate from those in the cell nucleus. It is thought that they were once bacteria living independent lives. Their enslavement within the larger cell was a turning point in the evolution of life, enabling the development of complex organisms and, closely related, the origin of two sexes. Unlike the DNA in the nucleus, mitochondrial DNA is passed down exclusively (or almost exclusively) via the female line. That's why it has been used by some researchers to trace human ancestry daughter-to-mother, to 'Mitochondrial Eve'. Mitochondria give us important information about our evolutionary history. And that's not all. Mitochondrial genes mutate much faster than those in the nucleus because of the free radicals produced in their energy-generating role. This high mutation rate lies behind our ageing and certain congenital diseases. The latest research suggests that mitochondria play a key role in degenerative diseases such as cancer, through their involvement in precipitating cell suicide. Mitochondria, then, are pivotal in power, sex, and suicide. In this fascinating and thought-provoking book, Nick Lane brings together the latest research findings in this exciting field to show how our growing understanding of mitochondria is shedding light on how complex life evolved, why sex arose (why don't we just bud?), and why we age and die. This understanding is of fundamental importance, both in understanding how we and all other complex life came to be, but also in order to be able to control our own illnesses, and delay our degeneration and death. Oxford Landmark Science books are 'must-read' classics of modern science writing which have crystallized big ideas, and shaped the way we think.

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.

From the front of the classroom to the top of the bestseller's list, award-winning educator Jay Phelan knows how to tell the story of how scientists investigate the big questions about life. He is also a master at using biology as a springboard for developing the critical thinking skills and scientific literacy that are essential to students through college and throughout their lives. Phelan's dynamic approach to teaching biology is the driving force behind *What Is Life?*—the most successful new non-majors biology textbook of the millennium. The rigorously updated new edition brings forward the features that made the book a classroom favorite (chapters anchored to intriguing questions about life, spectacular original illustrations, innovative learning tools) with new features, enhanced art, and full integration with its own dedicated version of LaunchPad—W.H. Freeman's breakthrough online course space, which fully integrates an interactive e-Book, all student media, a wide range of assessment and course management features, in a new interface in which power and simplicity go hand in hand. To order LaunchPad for free with this text please order bundle isbn 9781319028442. Books such as Richard Dawkins's *The Selfish Gene* have aroused fierce controversy by arguing for the powerful influence of genes on human behavior. But are we entirely at the mercy of our chromosomes? In *Are We Hardwired?*, scientists William R. Clark and Michael Grunstein say the answer is both yes—and no. The power and fascination of *Are We Hardwired?* lie in their explanation of that deceptively simple answer. Using eye-opening examples of genetically identical twins who, though raised in different families, have had remarkably parallel lives, the authors show that indeed roughly half of human behavior can be accounted for by DNA. But the picture is quite complicated. Clark and Grunstein take us on a tour of modern genetics and behavioral science, revealing that few elements of behavior depend upon a single gene; complexes of genes, often across chromosomes, drive most of our heredity-based actions. To illustrate this point, they examine the genetic basis, and quirks, of individual behavioral traits—including aggression, sexuality, mental function, eating disorders, alcoholism, and drug abuse. They show that genes and environment are not opposing forces; heredity shapes how we interpret our surroundings, which in turn changes the very structure of our brain. Clearly we are not simply puppets of either influence. Perhaps most interesting, the book suggests that the source of our ability to choose, to act unexpectedly, may lie in the chaos principle: the most minute differences during activation of a single neuron may lead to utterly unpredictable actions. This masterful account of the nature-nurture controversy—at once provocative and informative—answers some of our oldest questions in unexpected new ways

Sex at Dawn

The Case against Perfection

The Better Half

Why Women Have Sex

Why DNA Matters for Social Equality

Loose-leaf Version for *What is Life? A Guide to Biology with Physiology*

Does Sex Matter?

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

A provocative tour of recent findings in animal sexuality and evolutionary biology seeks to demonstrate how anthropomorphism and gender politics have affected our knowledge of the natural world and shows how a broader approach, based on feminist biology, can bring about a more rounded understanding.

At once a pioneering study of evolution and an accessible and lively reading experience, *The Mating Mind* marks the arrival of a prescient and provocative new science writer. Psychologist Geoffrey Miller offers the most convincing—and radical—explanation for how and why the human mind evolved. Consciousness, morality, creativity, language, and art: these are the traits that make us human. Scientists have traditionally explained these qualities as merely a side effect of surplus brain size, but Miller argues that they were sexual attractors, not side effects. He bases his argument on Darwin's theory of sexual selection, which until now has played second fiddle to Darwin's theory of natural selection, and draws on ideas and research from a wide range of fields, including psychology, economics, history, and pop culture. Witty, powerfully argued, and continually thought-provoking, *The Mating Mind* is a landmark in our understanding of our own species.

Using findings from the latest information in developmental psychology, neuroscience and education, this book debunks the assumed differences between male and female brain function and reveals the brain's remarkable plasticity and the influence of culture on identity. Reprint.

How Evolution Has Shaped the Modern World

Introduction to Probability

Race, Monogamy, and Other Lies They Told You

The Biology of Gender, Race, and Class

Females Are Mosaics

What the Sex Lives of Bugs, Birds, and Beasts Tell Us About Evolution, Biodiversity, and Ourselves

Since Darwin's day, we've been told that sexual monogamy comes naturally to our species. Mainstream science—as well as religious and cultural institutions—has maintained that men and women evolved in families in which a man's possessions and protection were exchanged for a woman's fertility and fidelity. But this narrative is collapsing. Fewer and fewer couples are getting married, and divorce rates keep climbing as adultery and flagging libido drag down even seemingly solid marriages. How can reality be reconciled with the accepted narrative? It can't be, according to renegade thinkers Christopher Ryan and Cacilda Jethá. While debunking almost everything we "know" about sex, they offer a bold alternative explanation in this provocative and brilliant book. Ryan and Jethá's central contention is that human beings evolved in egalitarian groups that shared food, child care, and, often, sexual partners. Weaving together convergent, frequently overlooked evidence from anthropology, archaeology, primatology, anatomy, and psychosexuality, the authors show how far from human nature monogamy really is. Human beings everywhere and in every era have confronted the same familiar, intimate situations in surprisingly different ways. The authors expose the ancient roots of human sexuality while pointing toward a more optimistic future illuminated by our innate capacities for love, cooperation, and generosity. With intelligence, humor, and wonder, Ryan and Jethá show how our promiscuous past haunts our struggles over monogamy, sexual orientation, and family dynamics. They explore why long-term fidelity can be so difficult for so many; why sexual passion tends to fade even as love deepens; why many middle-aged men risk everything for transient affairs with younger women; why homosexuality persists in the face of standard evolutionary logic; and what the human body reveals about the prehistoric origins of modern sexuality. In the tradition of the best historical and scientific writing, *Sex at Dawn* unapologetically upends unwarranted assumptions and unfounded conclusions while offering a revolutionary understanding of why we live and love as we do.

Why are people getting fatter? Why do so many rock stars end up dead at 27? Is there any hope of curbing population growth, rampant consumerism and the environmental devastation they wreak? Evolutionary biologist Rob Brooks argues that the origins of these twenty-first century problems can be found where the ancient forces of evolution collide with modern culture and economics. In *Sex, Genes and Rock n Roll* Brooks explores a tasting platter of topics, from the frivolous to the tragic falling in love, making music, our obsession with rock n roll, sexual conflict, fertility, obesity, consumption, ageing and more illustrating how evolution stands alongside economics, anthropology, psychology and political science in shaping our world.

Within twenty, maybe forty, years most people in developed countries will stop having sex for the purpose of reproduction. Instead, prospective parents will be told as much as they wish to know about the genetic makeup of dozens of embryos, and they will pick one or two for implantation, gestation, and birth. And it will be safe, lawful, and free. In this work of prophetic scholarship, Henry T. Greely explains the revolutionary biological technologies that make this future a seeming inevitability and sets out the deep ethical and legal challenges humanity faces as a result. "Readers looking for a more in-depth analysis of human genome modifications and reproductive technologies and their legal and ethical implications should strongly consider picking up Greely's *The End of Sex and the Future of Human Reproduction*...[It has] the potential to empower readers to make informed decisions about the implementation of advancements in genetics technologies." —Dov Greenbaum, *Science* "[Greely] provides an extraordinarily sophisticated analysis of the practical, political, legal, and ethical implications of the new world of human reproduction. His book is a model of highly informed, rigorous, thought-provoking speculation about an immensely important topic." —Glenn C. Altschuler, *Psychology Today*

Altruism, Evolution, and Why We Need Each Other to Succeed

An Intimate History