

The Oxford Book Of Science Fiction Stories

The F programming language is a dramatic new development in scientific programming. Building on the well-established strengths of the Fortran family of languages, it is carefully crafted to be both safe and regular, whilst retaining the enormously powerful numerical capabilities of its parent language, Fortran 90, as well as its data abstraction capability. Thus, an array language becomes available as part of a medium-size, widely-available language for the first time. In this respect, the language is clearly superior to older ones such as Pascal, C, and Basic. The book begins with an introductory chapter, then describes, in turn, the features of the language: language elements, expressions and assignments, control constructs, program units and procedures, array features, intrinsic procedures, and the input/output facilities. It is completed by six appendices, including the difference between F and Fortran 90, and solutions to most of the exercises. In the absence of a formal standard for F, this book is the defining document for the language, setting out the complete syntax and semantics of the language in a readable but thorough way. It is essential reading for users of F.

The field of 'science and religion' is exploding in popularity among both academics and the reading public. This is a comprehensive and authoritative introduction to the debate, written by the leading experts yet accessible to the general reader.

The proposal to vaccinate adolescent girls against the human papilloma virus ignited political controversy, as did the advent of fracking and a host of other emerging technologies. These disputes attest to the persistent gap between expert and public perceptions. Complicating the communication of sound science and the debates that surround the societal applications of that science is a changing media environment in which misinformation can elicit belief without corrective context and like-minded individuals are prone to seek ideologically comforting information within their own self-constructed media enclaves. Drawing on the expertise of leading science communication scholars from six countries, The Oxford Handbook of the Science of Science Communication not only charts the media landscape - from news and entertainment to blogs and films - but also examines the powers and perils of human biases - from the disposition to seek confirming evidence to the inclination to overweight endpoints in a trend line. In the process, it draws together the best available social science on ways to communicate science while also minimizing the pernicious effects of human bias. The Handbook adds case studies exploring instances in which communication undercut or facilitated the access to scientific evidence. The range of topics addressed is wide, from genetically engineered organisms and nanotechnology to vaccination controversies and climate change. Also unique to this book is a focus on the complexities of involving the public in decision making about the uses of science, the regulations that should govern its application, and the ethical boundaries within which science should operate. The Handbook is an invaluable resource for researchers in the communication fields, particularly in science and health communication, as well as to scholars involved in research on scientific topics susceptible to distortion in partisan debate.

A collection of scientific anecdotes from the past two thousand years offers insight into the personalities, friendships, rivalries, deceptions, hoaxes, tragedies, and mistakes that marked the history of science. (Science & Mathematics)

The Oxford Student's Science Dictionary provides comprehensive revision and exam support to secondary school students. This fully updated new edition has more words to match the new curriculum requirements and the higher vocabulary expectations at GCSE and beyond. Its clear layout and helpful diagrams make it contemporary and easy to use.

The Oxford Handbook of Comparative Politics offers a critical survey of the field of empirical political science through the collection of a set of chapters written by 48 top scholars in the discipline of comparative politics

The 2nd edition of Oxford Discover builds on its tried and tested methodology, developing 21st Century Skills in critical thinking, communication, collaboration and creativity to prepare students for future success at primary school and beyond. "How are seasons different?" "Which animals live in the wild" "Who makes you happy?" Oxford Discover uses "Big Questions" like these to tap into children's natural curiosity and enable them to ask their own questions, find their own answers, and explore the world around them. The course is underpinned by four major 21st Century Skills: critical thinking, communication, collaboration, and creativity ensuring Oxford Discover lays the foundations for success in the 21st Century. Use with Show and Tell 2nd edition to teach an inquiry-based course from Kindergarten through Primary.

A collection of classic science fiction short stories features tales by H. G. Wells, Arthur C. Clark, Frederik Pohl, Clifford Simak, Brian Aldiss, Ursula K. LeGuin, and many others. Edited by the author of The Road to Middle-Earth. 20,000 first printing.

Presents a history of physics, examining the theories and experimental practices of the science.

Written by biomedical scientists and clinicians, with the purpose of disseminating the fundamental scientific principles that underpin medicine, this new edition of the Oxford Handbook of Medical Sciences provides a clear, easily digestible account of basic cell physiology and biochemistry. It also includes an investigation of the traditional pillars of medicine (anatomy, physiology, biochemistry, pathology and pharmacology) integrated in the context of each of the major systems relevant to the human body. Cross-referenced to the Oxford Handbook of Clinical Medicine, and thoroughly illustrated, it is the ideal introduction to the medical sciences for medical students and biomedical scientists, as well as a valuable refresher for junior doctors.

The Oxford Book of Modern Science Writing Oxford University Press

Offers 609 articles by more than two hundred scholars covering the history of science from the Renaissance to the beginning of the twenty-first century.

Health foods and dietary supplements are widely used throughout the world - it is estimated that more than seventy million people in Europe regularly buy these products, and it is a billion dollar business in the USA. Health foods include vitamins, minerals, cereals, nuts, herbal medicines, functional foods, and many others. A large number of people use

these foods in the belief that they contribute to their general health, while, in most countries, little or no information is given on products explaining their therapeutic values. The Oxford Book of Health Foods begins with an account of modern concepts of human nutrition, followed by a series of over one hundred accounts of individual health foods and dietary supplements. In all cases the importance of these products in human health is explained, and, for herbal medicines, the evidence for their claimed therapeutic value is given, and toxic effects are described. Full-colour illustrations accompany these accounts. The Oxford Book of Health Foods will be of interest not just to health professionals, but to all people with an interest in health foods and healthy eating. The text is supplemented throughout by beautifully drawn botanical illustrations.

Drawing on the rich resources of the ten-volume series of The Oxford Handbooks of Political Science, this one-volume distillation provides a comprehensive overview of all the main branches of contemporary political science: political theory; political institutions; political behavior; comparative politics; international relations; political economy; law and politics; public policy; contextual political analysis; and political methodology. Sixty-seven of the top political scientists worldwide survey recent developments in those fields and provide penetrating introductions to exciting new fields of study. Following in the footsteps of the New Handbook of Political Science edited by Robert Goodin and Hans-Dieter Klingemann a decade before, this Oxford Handbook will become an indispensable guide to the scope and methods of political science as a whole. It will serve as the reference book of record for political scientists and for those following their work for years to come.

Qualitative interviewing is among the most widely used methods in the social sciences, but it is arguably the least understood. In *The Science and Art of Interviewing*, Kathleen Gerson and Sarah Damaske offer clear, theoretically informed and empirically rich strategies for conducting interview studies. They present both a rationale and guide to the science-and art-of in-depth interviewing to take readers through all the steps in the research process, from the initial stage of formulating a question to the final one of presenting the results. Gerson and Damaske show readers how to develop a research design for interviewing, decide on and find an appropriate sample, construct a questionnaire, conduct probing interviews, and analyze the data they collect. At each stage, they also provide practical tips about how to address the ever-present, but rarely discussed challenges that qualitative researchers routinely encounter, particularly emphasizing the relationship between conducting well-crafted research and building powerful social theories. With an engaging, accessible style, *The Science and Art of Interviewing* targets a wide range of audiences, from upper-level undergraduates and graduate methods courses to students embarking on their dissertations to seasoned researchers at all stages of their careers.

This handbook provides both an overview of state-of-the-art scholarship in philosophy of science, as well as a guide to new directions in the discipline. Section I contains broad overviews of the main lines of research and the state of established knowledge in six principal areas of the discipline, including computational, physical, biological, psychological and social sciences, as well as general philosophy of science. Section II covers what are considered to be the traditional topics in the philosophy of science, such as causation, probability, models, ethics and values, and explanation. Section III identifies new areas of investigation that show promise of becoming important areas of research, including the philosophy of astronomy and astrophysics, data, complexity theory, neuroscience, simulations, post-Kuhnian philosophy, post-empiricist epistemology, and emergence. Most chapters are accessible to scientifically educated non-philosophers as well as to professional philosophers, and the contributors - all leading researchers in their field -- bring diverse perspectives from the North American, European, and Australasian research communities. This volume is an essential resource for scholars and students.

The excitement of possible futures found in science fiction has long fired the human imagination, but the genre's acceptance by academe is relatively recent. No longer marginalized and fighting for respectability, science-fictional works are now studied alongside more traditional art forms. Tracing the capacious genre's birth, evolution, and impact across nations, time periods, subgenres, and media, *The Oxford Handbook of Science Fiction* offers an in-depth, comprehensive assessment of this robust area of scholarly inquiry and considers the future directions that will dictate the terms of the scholarly discourse. The Handbook begins with a focus on questions of genre, covering topics such as critical history, keywords, narrative, the fantastic, and fandom. A subsequent section on media engages with film, television, comics, architecture, music, video games, and more. The genre's role in the convergence of art and everyday life animates a third section, which addresses topics such as UFOs, the Atomic Era, the Space Race between the US and USSR, organized religion, automation, the military, sexuality, steampunk, and retrofuturism. The final section on worldviews features perspectives on SF's relationship to the gothic, evolution, colonialism, feminism, afrofuturism, utopianism, and posthumanism. Along the way, the Handbook's forty-four original essays cover novels by the likes of Mary Shelley, Jules Verne, H. G. Wells, Philip K. Dick, and Octavia Butler; horror-tinged pulp magazines like *Weird Tales*; B-movies and classic films that include *2001: A Space Odyssey*, *Close Encounters of the Third Kind*, and *Star Wars*; mind-bending TV shows like *The Twilight Zone* and *Dr. Who*; and popular video games such as *Eve Online*. Showing how science fiction's unique history and subcultural identity have been constructed in ongoing dialogue with popular discourses of science and technology, *The Oxford Handbook of Science Fiction* acknowledges the full range of texts and modalities that make science fiction today less a genre than a way of being in the world.

Climate change presents perhaps the most profound challenge ever confronted by human society. This volume is a definitive analysis drawing on the best thinking on questions of how climate change affects human systems, and how societies can, do, and should respond. Key topics covered include the history of the issues, social and political reception of climate science, the denial of that science by individuals and organized interests, the nature of the social disruptions caused by climate change, the economics of those disruptions and possible responses to them, questions of human security and social justice, obligations to future generations, policy instruments for reducing greenhouse gas emissions, and governance at local, regional, national, international, and global levels.

Despite remarkable economic advances in many societies during the latter half of the twentieth century, poverty remains a global issue of enduring concern. Poverty is present in some form in every society in the world, and has serious implications for everything from health and well-being to identity and behavior. Nevertheless, the study of poverty has remained disconnected across disciplines. The Oxford Handbook of the Social Science of Poverty builds a common scholarly ground in the study of poverty by bringing together an international, inter-disciplinary group of scholars to provide their perspectives on the issue. Contributors engage in discussions about the leading theories and conceptual debates regarding poverty, the most salient topics in poverty research, and the far-reaching consequences of poverty on the individual and societal level. The volume incorporates many methodological perspectives, including survey research, ethnography, and mixed methods approaches, while the chapters extend beyond the United States to provide a truly global portrait of poverty. A thorough examination of contemporary poverty, this Handbook is a valuable tool for non-profit practitioners, policy makers, social workers, and students and scholars in the fields of public policy, sociology, political science, international development, anthropology, and economics.

Part of The Oxford First Book series, this title presents and explains the themes of science, with the emphasis on practical applications, required by the National Curriculum at KS1 and early KS2. It includes themes, such as life processes, materials, pushes and pulls and light and sound. It also includes Glossary and Index.

Recent events have vividly underscored the societal importance of science, yet the majority of the public are unaware that a large proportion of published scientific results are simply wrong. The Problem with Science is an exploration of the manifestations and causes of this scientific crisis, accompanied by a description of the very promising corrective initiatives largely developed over the past decade to stem the spate of irreproducible results that have come to characterize many of our sciences. More importantly, Dr. R. Barker Bausell has designed it to provide guidance to practicing and aspiring scientists regarding how (a) to change the way in which science has come to be both conducted and reported in order to avoid producing false positive, irreproducible results in their own work and (b) to change those institutional practices (primarily but not exclusively involving the traditional journal publishing process and the academic reward system) that have unwittingly contributed to the present crisis. There is a need for change in the scientific culture itself. A culture which prioritizes conducting research correctly in order to get things right rather than simply getting it published.

This is part of a ten volume set of reference books offering authoritative and engaging critical overviews of the state of political science. This work explores the business end of politics, where theory meets practice in the pursuit of public good.

A highly successful general science course, the enduring popularity of Starting Science stems from its built-in differentiation, colourful, straightforward style, and its content-based approach.

Key Points: · Specifically designed for use in mixed-ability classes · Divided into units which are presented at three levels of difficulty · Careful explanation of scientific concepts set in everyday contexts · Range of questions for independent and class use

Assembles the world's leading scholars on public opinion and political behaviour to describe the state-of-the-art research on the beliefs, values and behaviours of contemporary politics.

How do we define compassion? Is it an emotional state, a motivation, a dispositional trait, or a cultivated attitude? How does it compare to altruism and empathy? Chapters in this Handbook present critical scientific evidence about compassion in numerous conceptions. All of these approaches to thinking about compassion are valid and contribute importantly to understanding how we respond to others who are suffering. Covering multiple levels of our lives and self-concept, from the individual, to the group, to the organization and culture, The Oxford Handbook of Compassion Science gathers evidence and models of compassion that treat the subject of compassion science with careful scientific scrutiny and concern. It explores the motivators of compassion, the effect on physiology, the co-occurrence of wellbeing, and compassion training interventions. Sectioned by thematic approaches, it pulls together basic and clinical research ranging across neurobiological, developmental, evolutionary, social, clinical, and applied areas in psychology such as business and education. In this sense, it comprises one of the first multidisciplinary and systematic approaches to examining compassion from multiple perspectives and frames of reference. With contributions from well-established scholars as well as young rising stars in the field, this Handbook bridges a wide variety of diverse perspectives, research methodologies, and theory, and provides a foundation for this new and rapidly growing field. It should be of great value to the new generation of basic and applied researchers examining compassion, and serve as a catalyst for academic researchers and students to support and develop the modern world.

Written by the world's leading scholars and researchers in the emerging field of sound studies, The Oxford Handbook of Sound Studies offers new and fully engaging perspectives on the significance of sound in its material and cultural forms. The book considers sounds and music as experienced in such diverse settings as shop floors, laboratories, clinics, design studios, homes, and clubs, across an impressively broad range of historical periods and national and cultural contexts. Science has traditionally been understood as a visual matter, a study which has historically been undertaken with optical technologies such as slides, graphs, and telescopes. This book questions that notion powerfully by showing how listening has contributed to scientific practice. Sounds have always been a part of human experience, shaping and transforming the world in which we live in ways that often go unnoticed. Sounds and music, the authors argue, are embedded in the fabric of everyday life, art, commerce, and politics in ways which impact our perception of the world. Through an extraordinarily diverse set of case studies, authors illustrate how sounds -- from the sounds of industrialization, to the sounds of automobiles, to sounds in underwater music and hip-hop, to the sounds of nanotechnology -- give rise to new forms listening practices. In addition, the book discusses the rise of new public problems such as noise pollution, hearing loss, and the "end" of the amateur musician that stem from the spread and appropriation of new sound- and music-related technologies, analog and digital, in many domains of life. Rich in vivid and detailed examples and compelling case studies, and featuring a companion website of listening samples, this remarkable volume boldly challenges readers to rethink the way they hear and understand the world.

In Systematicity, Paul Hoyningen-Huene answers the question "What is science?" by proposing that scientific knowledge is primarily distinguished from other forms of knowledge, especially everyday knowledge, by being more systematic. "Science" is here understood in the broadest possible sense, encompassing not only the natural sciences but also mathematics, the social sciences, and the humanities. The author develops his thesis in nine dimensions in which it is claimed that science is more systematic than other forms of knowledge: regarding descriptions,

explanations, predictions, the defense of knowledge claims, critical discourse, epistemic connectedness, an ideal of completeness, knowledge generation, and the representation of knowledge. He compares his view with positions on the question held by philosophers from Aristotle to Nicholas Rescher. The book concludes with an exploration of some consequences of Hoyningen-Huene's view concerning the genesis and dynamics of science, the relationship of science and common sense, normative implications of the thesis, and the demarcation criterion between science and pseudo-science.

There is an urgent need to better understand the causes and consequences of obesity, and to learn what works to prevent or reduce obesity. This volume accurately and conveniently summarizes the findings and insights of obesity-related research from the full range of social sciences including anthropology, economics, government, psychology, and sociology. It is an excellent resource for researchers in these areas, both bringing them up to date on the relevant research in their own discipline and allowing them to quickly and easily understand the cutting-edge research being produced in other disciplines. The Oxford Handbook of the Social Science of Obesity is a critical reference for obesity researchers and is also valuable for public health officials, policymakers, nutritionists, and medical practitioners. The first section of the book explains how each social science discipline models human behavior (in particular, diet and physical activity), and summarizes the major research literatures on obesity in that discipline. The second section provides important practical information for researchers, including a guide to publicly available social science data on obesity and an overview of the challenges to causal inference in obesity research. The third part of the book synthesizes social science research on specific causes and correlates of obesity, such as food advertising, food prices, and peers. The fourth section summarizes social science research on the consequences of obesity, such as lower wages, job absenteeism, and discrimination. The fifth and final section reviews the social science literature on obesity treatment and prevention, such as food taxes, school-based interventions, and medical treatments such as anti-obesity drugs and bariatric surgery.

The Oxford Illustrated History of Science is the first ever fully illustrated global history of science, from Aristotle to the atom bomb - and beyond. The first part of the book tells the story of science in both East and West from antiquity to the Enlightenment: from the ancient Mediterranean world to ancient China; from the exchanges between Islamic and Christian scholars in the Middle Ages to the Chinese invention of gunpowder, paper, and the printing press; from the Scientific Revolution of sixteenth and seventeenth century Europe to the intellectual ferment of the eighteenth century. The chapters that follow focus on the increasingly specialized story of science since end of the eighteenth century, covering experimental science in the laboratory from Michael Faraday to CERN; the exploration of nature, from intrepid Victorian explorers to twentieth century primatologists; the mapping of the universe, from the discovery of Uranus to Big Bang theory; the impact of evolutionary ideas, from Lamarck, Darwin, and Wallace to DNA; and the story of theoretical physics, from James Clark Maxwell to Quantum Theory and beyond. A concluding chapter reflects on how scientists have communicated their work to a wider public, from the Great Exhibition of 1851 to the internet in the early twenty-first century.

What is required for something to be evidence for a hypothesis? In this fascinating, elegantly written work, distinguished philosopher of science Peter Achinstein explores this question, rejecting typical philosophical and statistical theories of evidence. He claims these theories are much too weak to give scientists what they want--a good reason to believe--and, in some cases, they furnish concepts that mistakenly make all evidential claims a priori. Achinstein introduces four concepts of evidence, defines three of them by reference to "potential" evidence, and characterizes the latter using a novel epistemic interpretation of probability. The resulting theory is then applied to philosophical and historical issues. Solutions are provided to the "grue," "ravens," "lottery," and "old-evidence" paradoxes, and to a series of questions. These include whether explanations or predictions furnish more evidential weight, whether individual hypotheses or entire theoretical systems can receive evidential support, what counts as a scientific discovery, and what sort of evidence is required for it. The historical questions include whether Jean Perrin had non-circular evidence for the existence of molecules, what type of evidence J. J. Thomson offered for the existence of the electron, and whether, as is usually supposed, he really discovered the electron. Achinstein proposes answers in terms of the concepts of evidence introduced. As the premier book in the fabulous new series Oxford Studies in Philosophy of Science, this volume is essential for philosophers of science and historians of science, as well as for statisticians, scientists with philosophical interests, and anyone curious about scientific reasoning.

Science.

This is a marvellously engaging tour covering the whole of modern science, from transgenic crops to quantum tangles. Written by one of the most experienced and well-known names in science writing, it is also assuredly reliable science. Although arranged for convenience and quick reference as a collection of topics in alphabetical order, it is very different from any conventional encyclopedia. Each topic tells a story, making the book eminently browsable. Packed with information, yet carrying its immense learning lightly, this is a book that would appeal to anyone with the slightest interest in how the world works.

Hope has long been a topic of interest for psychologists, philosophers, educators, and physicians. In the past few decades, researchers from various disciplines and from around the world have studied how hope relates to superior academic performance, improved outcomes in the workplace, and improved psychological and physical health in individuals of all ages. Edited by Matthew W. Gallagher and the late Shane J. Lopez, The Oxford Handbook of Hope provides readers with a thorough and comprehensive update on the past 25 years of hope research while simultaneously providing an outline of what leading hope researchers believe the future of this line of research to be. In this extraordinary volume, Gallagher, Lopez, and their expert team of contributors discuss such topics as how best to define hope, how hope is distinguished from related philosophical and psychological constructs, what the current best practices are for measuring and quantifying hope, interventions and strategies for promoting hope across a variety of settings, the impact it has on physical and mental health, and the ways in which hope promotes positive functioning. Throughout its pages, these experts review what is currently known about hope and identify the topics and questions that will help guide the next decade of research ahead.

Five years in the writing by one of science fiction's most honored authors, Domsday Book is a storytelling triumph. Connie Willis draws upon her understanding of the universalities of human nature to explore the ageless issues of evil, suffering and the indomitable will of the human spirit. For Kivrin, preparing an on-site study of one of the deadliest eras in humanity's history was as

simple as receiving inoculations against the diseases of the fourteenth century and inventing an alibi for a woman traveling alone. For her instructors in the twenty-first century, it meant painstaking calculations and careful monitoring of the rendezvous location where Kivrin would be received. But a crisis strangely linking past and future strands Kivrin in a bygone age as her fellows try desperately to rescue her. In a time of superstition and fear, Kivrin—barely of age herself—finds she has become an unlikely angel of hope during one of history's darkest hours. Praise for *Doomsday Book* “A stunning novel that encompasses both suffering and hope. . . . The best work yet from one of science fiction’s best writers.”—The Denver Post “Splendid work—brutal, gripping and genuinely harrowing, the product of diligent research, fine writing and well-honed instincts, that should appeal far beyond the normal science-fiction constituency.”—Kirkus Reviews (starred review) “The world of 1348 burns in the mind’s eye, and every character alive that year is a fully recognized being. . . . It becomes possible to feel . . . that Connie Willis did, in fact, over the five years *Doomsday Book* took her to write, open a window to another world, and that she saw something there.”—The Washington Post *Book World* Explains the basic principles of science through the use of familiar objects and situations in sections on the structure of matter, the processes of life, and the forces that shape the universe. This handbook synthesizes what is known and debated about science in the classical world of ancient Greece and Rome, also touching briefly on Egypt, Mesopotamia, India, and China. Each of its many essays provides a synthesis and synopsis of the concepts and models of one of the ancient natural sciences.

Now in paperback, *The Oxford Children's Encyclopedia of Science and Technology* is a major reference book for children of 8 and over, giving a fascinating insight into the secrets of modern science. Some 135 major entries carefully explain the issues. Each article features colour photos and other illustrations specially selected to expand on the information given in the text. The articles are arranged alphabetically from Acids to X-rays, to allow quick access to information, and the text is completely up to date and has been checked by experts.

Winner of a 2008 Hugo Award, this new paperback takes readers on spectacular tour of the language created by science fiction. From "Stargate" to "Force Field," this dictionary opens a fascinating window into an entire genre, through the words invented by science fiction's most talented writers, critics, and fans. Each entry includes numerous citations of the word's usage, from the earliest known appearance forward. Drawn not only from science fiction novels and stories, citations also come from fanzines, screenplays, comics, songs, and the Internet.

How do individuals decide whether to accept human causes of climate change, vaccinate their children against childhood diseases, or practice social distancing during a pandemic? Democracies depend on educated citizens who can make informed decisions for the benefit of their health and well-being, as well as their communities, nations, and planet. Understanding key psychological explanations for science denial and doubt can help provide a means for improving scientific literacy and understanding critically important at a time when denial has become deadly. In *Science Denial: Why It Happens and What to Do About It*, the authors identify the problem and why it matters and offer tools for addressing it. This book explains both the importance of science education and its limitations, shows how science communicators may inadvertently contribute to the problem, and explains how the internet and social media foster misinformation and disinformation. The authors focus on key psychological constructs such as reasoning biases, social identity, epistemic cognition, and emotions and attitudes that limit or facilitate public understanding of science, and describe solutions for individuals, educators, science communicators, and policy makers. If you have ever wondered why science denial exists, want to know how to understand your own biases and those of others, and would like to address the problem, this book will provide the insights you are seeking.

This bestselling dictionary contains more than 9,500 entries on all aspects of chemistry, physics, biology (including human biology), earth sciences, computer science, and astronomy. This fully revised edition includes hundreds of new entries, such as bone morphogenetic protein, Convention on Biological Diversity, genome editing, Ice Cube experiment, multi-core processor, PhyloCode, quarkonium, and World Wide Telescope, bringing it fully up to date in areas such as nanotechnology, quantum physics, molecular biology, genomics, and the science of climate change. Supported by more than 200 diagrams and illustrations the dictionary features recommended web links for many entries, accessed and kept up-to-date via the Dictionary of Science companion website. Other features include short biographies of leading scientists, full page illustrated features on subjects such as the Solar System and Genetically Modified Organisms, and chronologies of specific scientific subjects including plastics, electronics, and cell biology. With concise entries on an extensive list of topics, this dictionary is both an ideal reference work for students and a great introduction for non-scientists.

Most health research to date has been pursued within the confines of scientific disciplines that are guided by their own targeted questions and research strategies. Although useful, such inquiries are inherently limited in advancing understanding the interplay of wide-ranging factors that shape human health. *The Oxford Handbook of Integrative Health Science* embraces an integrative approach that seeks to put together sociodemographic factors (age, gender, race, socioeconomic status) known to contour rates of morbidity and mortality with psychosocial factors (emotion, cognition, personality, well-being, social connections), behavioral factors (health practices) and stress exposures (caregiving responsibilities, divorce, discrimination) also known to influence health. A further overarching theme is to explicate the biological pathways through which these various effects occur. The biopsychosocial leitmotif that inspires this approach demands new kinds of studies wherein wide-ranging assessments across different domains are assembled on large population samples. The MIDUS (Midlife in the U.S.) national longitudinal study exemplifies such an integrative study, and all findings presented in this collection draw on MIDUS. The way the study evolved, via collaboration of scientists working across disciplinary lines, and its enthusiastic reception from the scientific community are all part of the larger story told. Embedded within such tales are important advances in the identification of key protective or vulnerability factors: these pave the way for practice and policy

initiatives seeking to improve the nation's health.

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