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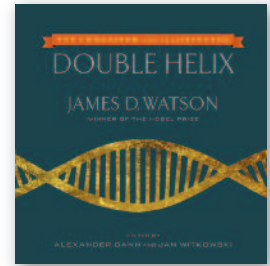
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## The Annotated and Illustrated Double Helix

By James D. Watson, *Cold Spring Harbor Laboratory*, Alexander Gann, *Cold Spring Harbor Laboratory*, and Jan Witkowski, *Cold Spring Harbor Laboratory*



The structure of DNA deduced by James Watson and Francis Crick in 1953 was one of the most significant scientific discoveries of the 20th century. Fifteen years later, Watson wrote *The Double Helix*, his classic account of the discovery. It was something new, a description of science in action written not as a formal autobiography or a measured history, but in the voice of a brash, ambitious young man who knew the big question in biology and wanted the answer.

In this edition, Watson's text is unchanged, but Alex Gann and Jan Witkowski have added over three hundred annotations on the events and characters portrayed, with facsimile letters and contemporary photographs, many previously unpublished. Their sources include newly discovered correspondence from Crick, the papers of Franklin, Pauling, and Wilkins, and they include a chapter dropped from the original edition.

*The Double Helix* is recognized by the Library of Congress as "A Book That Shaped America". This new edition, published to mark the 50th anniversary of the Nobel Prize for Watson, Crick, and Wilkins, and the 60th anniversary of the discovery itself, adds depth and richness to one of the most famous stories in science.

*"The Double Helix* is the best book I know about a scientific discovery—this new edition suffuses the whole with social history, fascinating documentation, photography, and cunning background research. The early fifties, the beginning of the modern age of molecular biology, spring to life."

—Ian McEwan, *author of Atonement*

*"The Double Helix* is an extraordinary book: a thrilling, novelistic account of one of the most surprising of all scientific discoveries. This new edition draws upon a remarkable and eclectic archive of information to bring to life the stories of those who found the secret of life."

— Matt Ridley, *author of Genome and Francis Crick*

2013, 345 pages, illus. (320 B&W), index  
Hardcover

ISBN 978-1-476715-49-0

(Published and/or distributed in conjunction with Simon & Schuster)

Order directly by clicking here.

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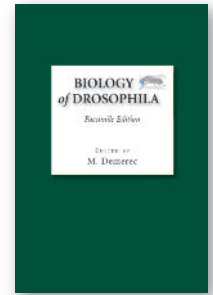
1-855-452-6793

E1

## Biology of *Drosophila*

Edited by M. Demerec

*Biology of Drosophila* was first published by John Wiley and Sons in 1950. Until its appearance, no central, synthesized source of biological data on *Drosophila melanogaster* was available, despite the fly's importance to science for three decades. Ten years in the making, it was an immediate success and remained in print for two decades. However, original copies are now very hard to find. This facsimile edition makes available to the fly community once again its most enduring work of reference.



2008, 632 pp., illus., indexes  
Paperback \$42 £27

ISBN 978-0-879698-28-7

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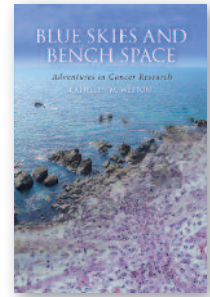




## Blue Skies and Bench Space Adventures in Cancer Research

By Kathleen Weston, *Cancer Research UK London Research Institute*

What happens when a cancer research institute's only remit is to be the best it can be? For more than 100 years, one laboratory in London has operated on just that premise. With a generous budget, inspired leadership, and a stable of scientific thoroughbreds, the Imperial Cancer Research Fund Laboratories produced some of the 20th century's most exciting advances in molecular biology. In its 21st century incarnation, as the Cancer Research UK London Research Institute, it continues to inspire a new generation of researchers.



In this book, written with the assistance of the past and present inhabitants of the London Research Institute, Kathy Weston tells the inside story of the lab's greatest voyages into the scientific unknown, revealing the personalities behind the dry passive voice of the scientific paper. Science is an art, a vocation, a complicated landscape of data in which, just sometimes, the trained and alert eye can detect a glint of gold. In these pages, the gold is present, but equally to be treasured are the all-too-human scientists stumbling towards its seductive glimmer.

2013, 336 pp., illus., glossary, index  
Hardcover \$22

ISBN 978-1-621820-77-2

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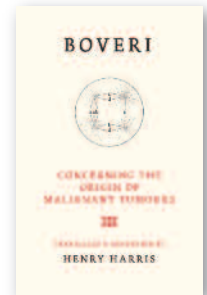


## Concerning the Origin of Malignant Tumours

By Theodor Boveri

Translated and annotated by Sir Henry Harris

An English translation of Boveri's famous monograph which was first published in Germany in 1914.



Written almost a hundred years ago, Theodor Boveri's *Zur Frage der Entstehung maligner Tumoren* has had a momentous impact on cancer research. In it he argues that malignancy arises as a consequence of chromosomal abnormalities and that multiplication is an inherent property of cells. With astonishing prescience, Boveri predicts in this monograph the existence of tumor suppressor mechanisms and is perhaps the first to suggest that hereditary factors (genes) are linearly arranged along chromosomes. This new translation by Sir Henry Harris, Regius Professor of Medicine Emeritus at Oxford University and former Editor-in-Chief of *Journal of Cell Science*, includes extensive annotations in which he discusses the relevance of Boveri's views today. It is essential reading for all cancer researchers, as well as those interested in the history of cytogenetics and cell biology.

2008, 82 pp.

Paperback \$25 £16

ISBN 978-0-879697-88-4

*Co-published with The Company of Biologists*

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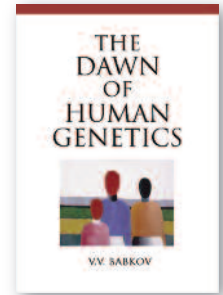
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# The Dawn of Human Genetics

By V.V. Babkov

Edited by James Schwartz; Translated from the Russian by Victor Fet



In Russia, the initial euphoria of the Bolshevik leaders for a new socialist society ... combined with a commitment to a truly universal health care system, gave a huge boost to the emergence of both the eugenic and medical aspects of human genetics. The obstacles that proved so formidable to the successful launch of the field in the West—the lack of available data on the genealogy of diseases in families, the difficulty in getting a statistically significant number of identical twins to study, and the skepticism of the medical establishment—were all swept aside in the Soviet Union. In the 1920s ... the groundwork was laid for a uniquely Russian approach to medical genetics and (the foundation of) the world's leading center for the study of the genetic basis of many diseases and human genetics in general. The immense success of the movement, which is little known even to Russians, is brought to life in V.V. Babkov's *The Dawn of Human Genetics*, as is its dramatic and violent end, which resulted in the “liquidation” of many of the country's finest biologists, as well as a major setback to the development of world science. Like many other promising ideas and projects that were born in the Soviet Union, this one was abruptly truncated and then virtually eradicated.

2013, 775 pp., illus. (91 B&W ), index  
 Hardcover \$69 £44

ISBN 978-1-936113-70-5

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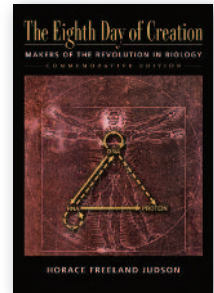
# The Eighth Day of Creation

## The Makers of the Revolution in Biology

(Commemorative Edition)

By Horace Freeland Judson

In this classic book, the distinguished science writer Horace Freeland Judson tells the story of the birth and early development of molecular biology in the US, the UK, and France. The fascinating story of the golden period from the revelation of the double helix of DNA to the cracking of the genetic code and first glimpses of gene regulation is told largely in the words of the main players, all of whom Judson interviewed extensively. The result is a book widely regarded as the best history of recent biological science yet published.



This commemorative edition, honoring the memory of the author who died in 2011, contains essays by his daughter Olivia Judson, Matthew Meselson, and Mark Ptashne and an obituary by Jason Pontin. It contains all the content added to previous editions, including essays on some of the principal historical figures involved, such as Rosalind Franklin, and a sketch of the further development of molecular biology in the era of recombinant DNA.

1996, 720 pp., illus., index, appendix, notes  
 Paperback \$56 £35

ISBN 978-0-879694-78-4

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Horace Freeland Judson Obituary

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Preface to the Commemorative Edition

Horace Judson (1931-2011)

Preface to the expanded edition

Foreword to the expanded edition

Foreword to the first edition

**Part I: DNA** — Function and Structure: The elucidation of the structure of deoxyribonucleic acid, the genetic material

1. "He was a very remarkable fellow. Even more odd then, than later."
2. "DNA, you know, is Midas' gold. Everybody who touches it goes mad."
3. "Then they ask you, 'What is the significance of DNA for mankind, Dr. Watson?'"

#### Exhibits

"Molecular Structure of Nucleic Acids: A Structure for Deoxyribose Nucleic Acid," by J.D. Watson and F.H.C. Crick. *Nature*, 171 (25 April 1953), pages 737-738

"Genetical Implications of the Structure of Deoxyribose Nucleic Acid," by J.D. Watson and F.H.C. Crick. *Nature*, 171 (30 May 1953): 964-967

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On the State of Molecular Biology Early in the 1970s  
 4. On T.H. Morgan's deviation and the secret of life

**Part II: RNA** — The Functions of the Structure:

The breaking of the genetic code, the discovery of the messenger

5. "The number of the beast"
6. "My mind was, that a dogma was an idea for which there was no reasonable evidence. You see?!"
7. "The gene was something in the minds of people as inaccessible as the material of the galaxies."
8. "He wasn't a member of the club."

**Part III: PROTEIN** — Structure and Function: The solution of how protein molecules work.

9. "As always, I was driven on by wild expectations."
10. "I have discovered the second secret of life."

**CONCLUSION, 1978:** "Always the same impasse"

**EPILOGUE:** "We can put duck and orange DNA together— with a probability of one."

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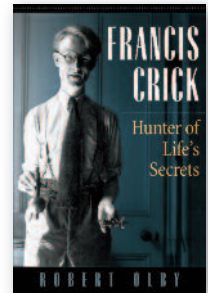


# Francis Crick

## Hunter of Life's Secrets

By Robert Olby

This engrossing biography by one of molecular biology's foremost scholars reveals the remarkable evolution of Francis Crick's scientific career and the shaping of his personality. From unpromising beginnings, he became a vital contributor to a remarkably creative period in science. Olby chronicles Crick's life from his early studies in biophysics, to the discovery of the structure of DNA, to his later work in neuroscience and the nature of consciousness. This account is woven together with insights into his personal life gained through access to Crick's papers, family, and friends. Robert Olby's book is a richly detailed portrait of one of the great scientists of our time.



2009, 538 pp., illus., indexes

Hardcover \$46 £29

ISBN 978-0-879697-98-3

Also available as an Amazon Kindle book.

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## Genes, Girls, and Gamow After the Double Helix

By James D. Watson, *Cold Spring Harbor Laboratory*

Cold Spring Harbor Laboratory Press has a limited supply of autographed copies of the hardcover edition of *Genes, Girls, and Gamow*, by James D. Watson, for distribution in the United States and Canada only. This represents a rare opportunity to own a book signed by one of this century's most influential scientists.



FROM THE PUBLISHER (Alfred A. Knopf): Immediately following the revolutionary discovery of the structure of DNA by James D. Watson and Francis Crick in 1953, the world of molecular biology was caught up in a gold rush. The goal: to uncover the secrets of life that the newly elucidated molecule promised to reveal. *Genes, Girls, and Gamow* is James Watson's report on the amazing aftermath of the DNA breakthrough, picking up where his now classic memoir, *The Double Helix*, leaves off.

Here are the collaborations and collisions of giants, not only Watson and Crick themselves, but also legions of others, including Linus Pauling (the greatest chemist of the day), Richard Feynman (the bongo-playing cynosure of Caltech), and especially George Gamow, the bearlike, whiskey-wielding Russian physicist, who had turned his formidable intellect to the field of genetics; with Gamow—an irrepressible prankster to boot—Watson would found the legendary RNA Tie Club.

But Watson—at twenty-five already the winner of genetic research's greatest jackpot—is obsessed with another goal as well: to find love, and a wife equal to his unexpected fame. As he and an international cast of roguish young colleagues do important research, they also compare notes and share complaints on the scarcity of eligible mates. And amid the feverish search for the role of the then still mysterious RNA molecule, Watson's thoughts are seldom far from the supreme object of his desire, an enthralling Swarthmore coed who also happens to be the daughter of Harvard's most eminent biologist.

Part scientific apprenticeship, part sentimental education, *Genes, Girls, and Gamow* is a penetrating revelation of how great science is accomplished. It is also a charmingly candid account of one young man's full range of ambitions.

2001, 336 pp., illus.

Hardcover \$53 (autographed copy)

For distribution in the United States and Canada only.

ISBN 978-0-375412-83-7



# A History of Genetics

By A.H. Sturtevant, *California Institute of Technology*

With a New Introduction by Edward B. Lewis

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 offering full-text versions of the key papers discussed in the book, including the world’s first genetic map (<http://www.esp.org/books/sturt/history>).



2001, 174 pp., illus., appendices, bibliography, index  
 Paperback \$21 £13

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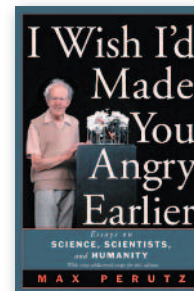
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## I Wish I'd Made You Angry Earlier Essays on Science, Scientists, and Humanity

By Max F. Perutz, *formerly Chairman and Member of the MRC Laboratory of Molecular Biology, Cambridge, England*



Science is no quiet life. Imagination, creativity, ambition, and conflict are as vital and abundant in science as in artistic endeavors. In this collection of essays, the Nobel Prize–winning protein chemist Max Perutz writes about the pursuit of scientific knowledge, which he sees as an enterprise providing not just new facts but cause for reflection and revelation, as in a poem or painting. Max Perutz’s essays explore a remarkable range of scientific topics with the lucidity and precision Perutz brought to his own pioneering work in protein crystallography. He has been hailed as an author who “makes difficult subjects intelligible and writes with the warmth, humanity, and broad culture which has always characterized the great men of science.” Of his previous collection of essays, a reviewer said “They turn the world of science and medicine into a marvelous land of adventure which I was thrilled to explore in the company of this wise and human [writer].” Readers of this volume can journey to the same land, with the same delight.

Max Perutz (1914–2002) was a brilliant scientist, a visionary of molecular biology, and a writer of elegant essays infused with humanity and wisdom. This expanded paperback edition of his very successful book *I Wish I'd Made You Angry Earlier* contains nine additional essays, and a warmly evocative portrait of Max by his friend and professional colleague Sir John Meurig Thomas.

2003, 460 pp., index  
Paperback \$16 £10

ISBN 978-0-879696-74-0

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(\*indicates new essay)

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I Wish I'd Make You Angry Earlier

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How the Secret of Life Was Discovered

Dangerous Misprints

A Deadly Inheritance

Darwin Was Right

A Passion for Crystals

The Top Designer\*

The Great Sage\*

It Ain't Necessarily So\*

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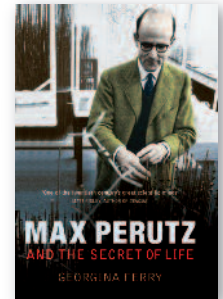
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## Max Perutz and the Secret of Life

By Georgina Ferry

Few scientists have thought more deeply about the nature of their calling and its impact on humanity than Max Perutz (1914–2002). Born in Vienna, Jewish by descent, lapsed Catholic by religion, he came to Cambridge in 1936, to join the lab of the legendary Communist thinker J.D. Bernal. There he began to explore the structures of the molecules that hold the secret of life. In 1940, he was interned and deported to Canada as an enemy alien, only to be brought back and set to work on a bizarre top secret war project. In 1947, he founded the small research group in which Francis Crick and James Watson discovered the structure of DNA: under his leadership it grew to become the world-famous Laboratory for Molecular Biology. Max himself explored the protein hemoglobin and his work, which won him a Nobel Prize in 1962, launched a new era of medicine, heralding today's astonishing advances in the genetic basis of disease.



Max Perutz's story, wonderfully told by Georgina Ferry, brims with life. It has the zest of an adventure novel and is full of extraordinary characters. Max was demanding, passionate and driven but also humorous, compassionate and loving. Small in stature, he became a fearless mountain climber; drawing on his own experience as a refugee, he argued fearlessly for human rights; he could be ruthless but had a talent for friendship. An articulate and engaging advocate of science, he found new problems to engage his imagination until weeks before he died aged 88.

**About the author:** Georgina Ferry is a former staff editor on *New Scientist*, and contributor to BBC Radio 4's *Science Now*. Her books include the acclaimed biography *Dorothy Hodgkin: A Life* (1998); *The Common Thread* (2002, with Sir John Sulston) and *A Computer Called LEO* (2003). She lives in Oxford.

2007, 352 pp., illus., glossary, index  
Hardcover \$40 £25

ISBN 978-0-879697-85-3

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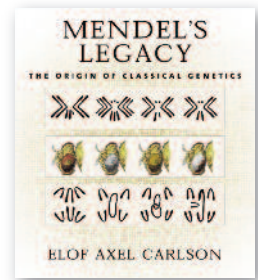


# Mendel's Legacy

## The Origin of Classical Genetics

By Elof Axel Carlson, *Professor Emeritus, State University of New York at Stony Brook*

*Mendel's Legacy* by Elof Carlson is a first history of classical genetics, the era in which the chromosome theory of heredity was proposed and developed. Highly illustrated and based heavily on early 20th century original sources, the book traces the roots of genetics in breeding analysis and studies of cytology, evolution, and reproductive biology that began in Europe but were synthesized in the United States through new Ph.D. programs and expanded academic funding. Carlson argues that, influenced largely by new technologies and instrumentation, the life sciences progressed through incremental change rather than paradigm shifts, and he describes how molecular biology emerged from the key ideas and model systems of classical genetics. Readable and original, this narrative will interest historians and science educators as well as today's practitioners of genetics.



2004, 332 pp., illus., index  
 Hardcover \$47 £15

ISBN 978-0-879696-75-7

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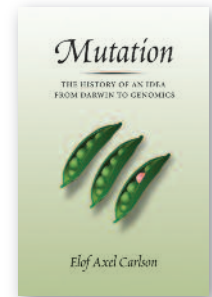
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## Mutation

### The History of an Idea from Darwin to Genomics

By Elof Axel Carlson, *Professor Emeritus, State University of New York at Stony Brook; Visiting Scholar, Institute for Advanced Study, Indiana University*



Today, most scientists regard the term “mutation” as a description of a change in an individual gene, and more precisely as some minute alteration of the DNA of that gene, especially a nucleotide substitution. But the idea of mutation has changed considerably from the pre-Mendelian concepts of Darwin’s generation, who viewed “fluctuating variations” as the raw material on which evolution acted, to today’s up-to-the-minute genomic context of mutation. *Mutation: The History of an Idea from Darwin to Genomics* explores six generations of mutation research, providing the background—the people and the ideas—for this biological journey.

After exploring Darwin’s and Francis Galton’s concepts of mutation, Carlson shows how the 1900 rediscovery of Gregor Mendel’s experiments led to a discontinuous model of evolution by mutation and how cytological investigations led to the chromosome theory of heredity of classical genetics in which there was random mutation in genes. Carlson details how Mendelian and biometric approaches to heredity and evolution were closely tied and how induction of mutations by radiation and chemical mutagens led to biochemical investigations of gene action, shifting attention to the chemistry of the gene. The interpretation of the gene as DNA and the deciphering of the genetic code then gave rise to molecular interpretations of mutation, views that also impacted evolutionary biology, population genetics, commercial development of plants and animals, and human genetics.

This book shows how generational definitions or assessments of mutation have responded to the technologies added to science and the experiments that abounded with the inquiries of each successive generation. These observations are combined with an exploration of how the nonscientific public has shifted its understanding and concern about mutations over the past 150 or more years. Carlson’s historical approach in this book—examining the evolution of a concept—reveals the way science works, incrementally by small steps of additions and replacements rather than by dramatic, and rare, paradigm shifts.

2011, 163 pp., illus., index  
Hardcover \$57 £36

ISBN 978-1-936113-30-9

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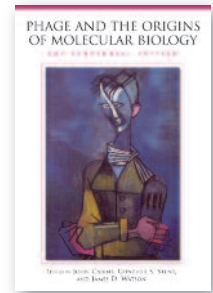


# Phage and the Origins of Molecular Biology

## The Centennial Edition

Edited by John Cairns, *Cold Spring Harbor Laboratory*; Gunther S. Stent, *University of California, Berkeley*; James D. Watson, *Harvard University*

This landmark collection of essays, written by pioneers in the field of molecular biology, was first published in 1966 as a 60th birthday tribute to Max Delbrück, a formative influence on many of today's leading scientists. The book served as a valuable historical record as well as a remarkable portrait of a small, pioneering, close-knit scientific community that focused intensely on the most important questions in biology. This centennial edition reflects a more personal side of Delbrück, and includes a series of photographs from his family's albums.



“Delbrück had been a kind of Gandhi of biology...It was his extraordinary personality that made him the spiritual force which affected the scientific and personal lives of so many people.” —Gunther S. Stent

2007, 394 pp., illus., timeline, photo gallery  
Hardcover \$30 £19

ISBN 978-0-879698-00-3

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John Cairns, Gunther S. Stent,  
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Reprinted from *Science*, April 26, 1968

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Reprinted from *Genetics*, May 1982

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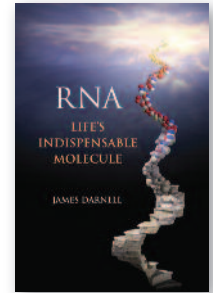


# RNA

## Life's Indispensable Molecule

By James Darnell, *The Rockefeller University*

In *RNA: Life's Indispensable Molecule*, Jim Darnell provides a comprehensive and captivating account of RNA research, illuminated by his own life-long and celebrated engagement in the field. Darnell describes how scientists unraveled fundamental questions about the biochemical and genetic importance of RNA—how mRNAs are generated and used to produce proteins, how noncoding and catalytic RNAs mediate key cellular processes, and how RNA molecules likely initiated life on Earth. With a scope extending from the early 20th century to the present day, and with the clarity expected from an accomplished textbook author, he conveys the intellectual context in which these questions first arose and explains how the key experiments were structured and answers obtained. The book is geared towards scientists from the graduate level on up, and will particularly appeal to active investigators in RNA biology, educators of molecular biology and biochemistry, and science historians.



2011, 416 pp., illus., sources, index

Hardcover \$40 £25

ISBN 978-1-936113-19-4

Also available as an Amazon Kindle book.

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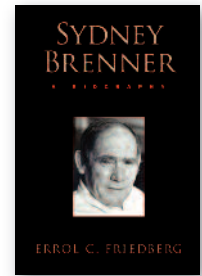


# Sydney Brenner

## A Biography

By Errol C. Friedberg, *University of Texas Southwestern Medical Center at Dallas*

Over his long and inspiring career, the Nobel Laureate Sydney Brenner has made some of the most significant and game-changing discoveries in the field of molecular biology. But Brenner's reach has extended well beyond his own research to inspire new generations of young scientists and to promote the development of science and biotechnology around the world. Based on his personal recollections, with contributions and correspondence from his close friends and colleagues, this book tells the lively story, not only of Brenner himself, but of what came to be known as the "golden age" of biology.



2011, 334 pp., illus., index

Hardcover \$40 £25

ISBN 978-0-879699-47-5

Also available as an Amazon Kindle book.

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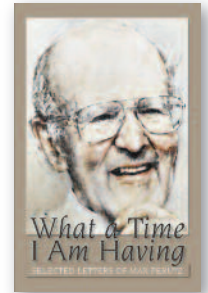
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## What A Time I Am Having Selected Letters of Max Perutz

Edited by Vivien Perutz with a memoir by David Blow

Selected by his daughter, Vivien, from Max Perutz’s voluminous correspondence, the letters reproduced here portray their author with a spontaneity and directness no autobiography could have matched. They chronicle Perutz’s adventurous life through his own vivid, erudite and humorous pen, documenting the hopes, roadblocks and moments of elation of his sixty-year quest to understand the molecular biology of hemoglobin. The first great step in this quest — unraveling the molecular structure of hemoglobin — earned Perutz the 1962 Nobel Prize in Chemistry. Narrated against a backdrop of family and friends, politics and war, literature, travels, and Max’s beloved mountains, these letters provide rare insight into the thoughts of a remarkable and very human scientist, and delightful sketches of some of the people he encountered. Starting with lively letters to a girlfriend written in his youth in Vienna and the impressions of a young scientist in Cambridge, the letters progress to the desperate pleas of an “enemy alien” interned in Canada during World War II. The diary of Perutz’s subsequent super-secret war work for the British to build a floating ice airstrip in the North Atlantic, ardent campaigning letters to scientists and politicians, and self-deprecating stories of his own mishaps written to amuse his children and grandchildren are some of the many highlights of these fascinating letters, unique in the annals of recent scientific history. This book is a companion to Georgina Ferry’s *Max Perutz and the Secret of Life*. Together these volumes provide a portrait of an extraordinary character in the development of molecular biology.



2009, 506 pp., illus., index  
Hardcover \$40 £25

ISBN 978-0-879698-64-5

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