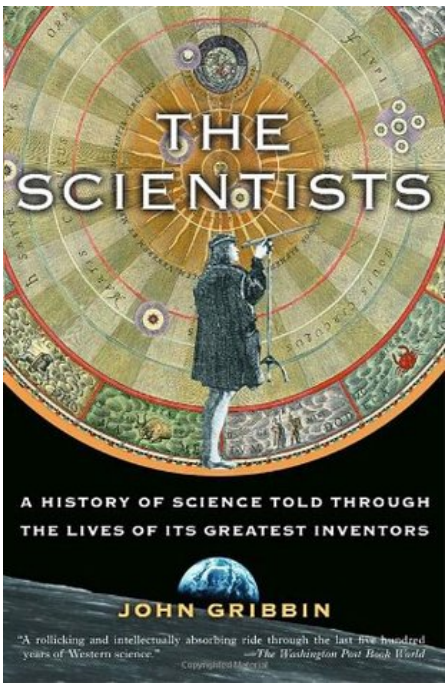


# The Scientists: A History of Science Told Through the Lives of Its Greatest Inventors

*John Gribbin*

# The Scientists: A History of Science Told Through the Lives of Its Greatest Inventors

*John Gribbin*

**The Scientists: A History of Science Told Through the Lives of Its Greatest Inventors** John Gribbin
A wonderfully readable account of scienti?c development over the past ?ve hundred years, focusing on the lives and achievements of individual scientists, by the bestselling author of **In Search of Schrödinger's Cat**

In this ambitious new book, John Gribbin tells the stories of the people who have made science, and of the times in which they lived and worked. He begins with Copernicus, during the Renaissance, when science replaced mysticism as a means of explaining the workings of the world, and he continues through the centuries, creating an unbroken genealogy of not only the greatest but also the more obscure names of Western science, a dot-to-dot line linking amateur to genius, and accidental discovery to brilliant deduction.

By focusing on the scientists themselves, Gribbin has written an anecdotal narrative enlivened with stories of personal drama, success and failure. A bestselling science writer with an international reputation, Gribbin is among the few authors who could even attempt a work of this magnitude. Praised as "a sequence of witty, information-packed tales" and "a terri? c read" by **The Times** upon its recent British publication, **The Scientists** breathes new life into such venerable icons as Galileo, Isaac Newton, Albert Einstein and Linus Pauling, as well as lesser lights whose stories have been undeservedly neglected. Filled with pioneers, visionaries, eccentrics and madmen, this is the history of science as it has never been told before.

*From the Hardcover edition.*

## The Scientists: A History of Science Told Through the Lives of Its Greatest Inventors Details

| | | |
|---|---|---|
| Date | : | Published August 10th 2004 by Random House Trade Paperbacks (first published 2002) |
| ISBN | : | 9780812967883 |
| Author | : | John Gribbin |
| Format | : | Paperback 672 pages |
| Genre | : | Science, History, Nonfiction, History Of Science, Biography |

# From Reader Review The Scientists: A History of Science Told Through the Lives of Its Greatest Inventors for online ebook

### CF says

Phew! A really great history of science starting with the 15th century and working right up to the present day. Focusing on not just the scientific discoveries but the scientists themselves, this gives a really human feel to the story of science. We get to know a little about everyone's life, from Copernicus to Einstein. Also touching on a bit of the classical Greek period, where philosophy overlapped with science.

Gribbin's style of writing is comprehensive without being too much. He acknowledges that he cannot fit everything in, but still makes sure we know where to find more information. This is separated into all the differing types of science, astronomy, physics, touching on mathematics, astrophysics, and more.

I enjoyed this, and even though parts of it were a bit past my intelligence to fully understand, it will be good to use in future as a reference. I would like to read more of John Gribbin's popular science books.

---

### Sandy says

I should preface this by saying that I love learning about science, especially chemistry.

I wondered at the outset if I would ever finish this book because it contained over 600 pages about the history of science, but I found myself turning pages much faster than expected. Gribbin does a fantastic job of keeping science history interesting by intermingling fascinating tales about the lives of several prominent scientists and squabbles had amongst those great thinkers. He manages to mention almost every notable scientist (that I can think of) from Ptolemy to present, with accompanying details that are often new to the reader.

I found his description of the relationship between Hooke and Newton to be particularly interesting. It is the relationships among all the different scientists that is handled in great light in this book. Gribbin acknowledges which scientists came before or after others, those who lived and worked along side one another, those who were close friends, those who built on the ideas of others, and those who were great competitors. For example, Robert Darwin found an unusual fossil near his home and brought it to the Royal Society where he met Newton (the Society’s President at the time). His son Erasmus Darwin was a great thinker and mingled with James Watt, Ben Franklin, and Joseph Priestly. Erasmus’ son Robert Darwin was a physician. His son was Charles Robert Darwin, now famous for his ideas on evolution by natural selection. Thus, Charles Darwin’s great-grandfather had met Isaac Newton.

Three scientists independently “discovered” a wealth of information pertaining to heredity and were about to publish in 1900, when one learned that Gregor Mendel had already published it in 1867. The true nature of scientific discovery is described well. The author argues, “It is the luck of the draw, or historical accident, whose name gets remembered as the discoverer of new phenomenon.” “Geniuses maybe; but irreplaceable certainly not.” His only exception to these criteria is Isaac Newton, without whom the author thinks science would have been held back a very long time.

Fascinating, Exciting, Science!

### D?nnis says

Magnificent tour-de-force on the development of science as we know it.

With one big limitation, which the author duly acknowledges: it doesn't cover advances and breakthroughs in medical science, no matter how stupendous they were. If you want to see how discoveries of vaccination, microbes and viruses, anaesthesia etc... fit into a larger context of science development, you better look elsewhere. Names of Jenner, Pasteur, Koch, Flemming and multiple others are found nowhere on its pages. There you may encouter only subtlest hints on how major events in chemistry, physics, biology and in scientific method in general affected medicine.

Yet, since it was more or less unambigously declared by the author, the abscence of such narrative could not be considered a book's flaw. Excellent account otherwise!

---

### Emma says

Phew! I was suffering from some serious scientific history fatigue towards the end of this book.

Gribbin has produced a very interesting book here. The absence of the more obscure characters in the history of science or the lack of detail about them was disappointing as was the strong focus on physics but even so this book was enjoyable. Gribbin sums up scientific discoveries and theories well and provides the reader with interesting details about well known scientific figures. There are a lot of gaps in the scientific record when reading and I was getting tired of being told that such and such a theory was beyond the scope of the book but Gribbin is a good story teller and communicator making up for some of the aforementioned shortcomings.

---

### Mohamed Adam says

??? ?????? ??????? ?? ?????
?????? ?? ???? ???? ?? ?? ?????? ???????????
????? ?? ???? ??????? ??? ????? ??????? ?????? ??????? ??? ???????????

???? ???? ?????? ??? ??????? ???? ???????
?? ???? ?? ???????? ??????? ???????
?? ?????? ????????? ????? ????????? ??? ??? ??? ??? ??? ???? ??? ?? ??????? ?? ??? ??????
???? ????? ?? ????? ??????? ??????? ?????? ???? ??? ???? ?? ???? ???? ???? ?????? ???? ??? ???? ????????
?? ????? ?????? ?? ??????

??? ??????? ????? ???? ??? ???? ????????? ?????

????? ??? ????? ?????? ????? ?????? ??? ?????? ????? ?????? ???
??? ????? ?????? ????? ?? ????

?????? ????????

---

### ????? ????? ????? says

?????? ?????? ????? ????? ?? ???? ????? ??????? ??????? ???? ?????? ????????? ?? ???? ?????? ??????? ??? ?????? ????? ?? ????? ???????? ?????? ???? ??? ?? ????????? ??????????? ?????? ?? ?????? ?????? ???? ??? ????? ????? ???? ????? ?????? ???? ????? ?????? ???? ????? ???? ??? ????? ????? ????? ?????? ?????? ?????? ???? ?????.

???? ?????? ???? 1534 ?????? ???? 2001 ????? ?????? ????? ??????? ???? ?? ??? ??? ?????? ?????? ????????? ??????? ???? ??? ?????? ?????? ????? ??????? ?????? "???? ??? ???????" ?????? ??????? ????????? ??? ?????? ?????? ???? ?????? "?? ????? ??????? ????????" ??? ??????????.

???? ?????? ????? ?? ???? ??????? ???? ????? ????? ?? ????? ?????? ??????? ?????? ????: "??? ??? ??????? ?? ????? ?? ?????? ?? ????? ?? ???? ??? ????? ???? ???? ????"? ??????? ??? ??? ?????? ?? ?? ?????? ??????? ?????? ?? ??? ?? ????? ???? ???? ????? ????? ???? ????? ????? ?? ??????? ??? ???? ?????? ??????? ?? ???? ???????? ???????? ?? ????? ?????? ?? ??????? ???? ?? ??? ????? ??????.

?????? ??? ??????? ??????? ??? ?? ??????? ?????? ???? ?????? ?? ??? ?? ??? ?? ???? ??????? ????? ????? ??? ???????? ?????? ???? ?? ???? ?????? ???? ???? ????? ????? ??? ?? ?? ???? ?????? ?? ??? ?????? ??????.

??? ??? ?????? ???????? ?????? ?? ??? ?????? ??????? ??? ?? ????? ?????? ???? ??? ?? ???? ????? ??? ?????? ??????? ???????? ??????? ??????????? ??????? ???? ???? ????? ?? ?????? ??? ???? ??????? ???????? ???? ?????? ??? ??????? ?????? ?????? ?? ????? ??? ????? ?? ???? ??????? ???? ???? ???? ???? ??? ??? ????? : ??? ????? ?? ???? ??????? ???? ???? ??? ??? ????? ??? ??? ????? ?????? ??????? ???????? ????? ????? ?????? ?????? ??? ?????? ??????? ?? ?????? ???? ???????? ??? ????.

????? ??? ?????? ?? ??? ??????? ???? ????? ???? ????? ???? ????: ??????? ??????? ?? ?????? ??????? ??????? ?????? ??? ?? ??? ?? ???????? ????? ??? ??? ???? ?????? ???? ?? ?????? ??????? ????? ????? ?? ???? ??????? ???? ?? ???? ??????? ???????? ???????? ???? ???? ??? ??? ????? ????? ??? ????? ???.

????? ?????? ?? ?????? ?? ????? ?????? ????? ?? ?? ???? ??? ????? ?????? ??? ?????? ????? ??????? ?????? ??? ??? ???? ?? ????? ???? ????? ?? ????? ??????.

??? ?????? ??????? ?? ??? ???? ?????? ??????? ?? ??????? ????? ????? ?? ????? ???????? ??? ????? ????? ??? ???? ?? ???? ???? ?? ?? ??? ?? ????? ?????? ?? ????? ?????? ??????.

---

### JS Found says

You'd want to get this book for your kid. Along with Carl Sagan's Cosmos and both TV adaptations. Because science, properly taught or written about, can be very exciting for a kid to learn. This is the story of all its wonders told by bios of the people who invented and discovered them.

400 years of science are elegantly compacted into this synthesis, but Gribbin writes with such ease and clarity, with all the pleasures of narrative history, that you don't notice you're learning science. Not the tedious memorization of facts in a school textbook. This is science as it was discovered, when the scientists had no idea what they had found out, and what they were learning. It's really a suspense tale. A scientist will do an experiment, not sure whether it will work or not, not knowing what he will discover, and whether his hypothesis will be proven right, or at least not wrong, or whether he will stumble upon something else entirely. Something perhaps revolutionary that will permanently change life and the world forever.

Gribbin structures the story by time and scientific subject. We start with Copernicus and Galileo and end

with quantum physics and the latest cosmology. In between chemistry, evolution, genetics, geology, electromagnetism and the nature of light are elucidated. The bios help ease the learning by humanizing it: science becomes the discoveries of flawed people, from all classes and walks of life who had desires, fears, rivalries, and lived through turbulent historical times, like everyone else. The story of science is a continuum--men and women from all through time building and expanding upon the work of the people who came before.

An essential book for any science library.

---

### ????? says

?????? ??? ???????:
?? ????-??? ???? ?????? ?? ??????- ????? ????? ?? ??????? ???????? ???????? ?? ??? ??????.

????? ?????? ?? ??? ????? ???? ????? ????? ???? ???????? ???????? ???? ????? ????? ????? ????? ???????
??????? ?? ???????? ???????? ???? ??????? ??? ???? ??? ?????? ?? ????? ?????? ?????? ??????? ? ???????? ??
???????:
?????: ??? ?????? ????? ???? ?? ???? ??? ???????.
??????: ??? ?????? ?? ??????? ?????? ??? ???? ????? ?????? ?????? ??? ??? ?????????
??? ???????? ?? ??? ?????? ??????? ????? ?? ??? ???.

??????????????????????????????????????

. ?????? ????? ?? ????? ??????? ?????? ????? ???? ??????? ???? ??? ?? ????? ?? ????? ??? ?? ??? ???? ??????
? ?????? ???????? ??? ????? ????? ?? ??????? ????????.
. ??? ????? ???? ?????? ?????? ??????? ?? ????? ???????? ?????? ?? ?? ????? ?????? ???????? ?? ??????
??????.
. ?? ???? ?? ????? ??? ????? ?? ?????? ???? ?? ???????? ??? ?????? ???? ??? ????? ????? ?????? ? ?????

?? ???? ?????? ????? ??????? ???????? ???? ??? ??? ?????..

---

### Philipp says

A history of science told in many lives - each chapter focusing on one aspect of the history of science, with the chapter itself being a chronologically ordered story of scientific lives. In that aspect, it's very much like Bell's Men Of Mathematics (GR link, my review), not only is The Scientists structured similarly, the humorous tone and fun anecdotes are similar too:

> Henry was painfully shy and hardly ever went out except to scientific gatherings - even at these, latecomers sometimes found him standing outside the door trying to pluck up enough courage to enter, long after he was a respected scientist in his own right. He communicated with his servants by writing them notes, wherever possible; and there are several stories about how on unexpectedly encountering a woman he did not know, he would shield his eyes with his hand and literally run away.

Since the author himself is a astrophysicist the focus is a bit more on physics, cosmology and astrophysics than on medicine or biology - two chapters are on biology (one on Lyell -> Darwin -> Wallace, one on Mendel -> many more I haven't heard of before (nice! Ever heard of Miescher?) -> Crick/Watson), only one part of a chapter is on medicine, one chapter on geology, the rest is physics (but that is a truth of the history of science - for a long time, Western scientists focused more on the stars and mechanics than on the human body).

Some more aspects I noted:

- Science shifted from a (often rich) gentleman's hobby to a full-time profession sometime around Darwin's life. I got nostalgic for a time where you could just work your whole life for a king without having to fill out grant applications every few years; but then again, you'd be dependent on the king's whims and mortality. Plus, with only a few outliers it was practically impossible for a "poor" person to even begin with scientific work.

- The descriptions of Galileo's and Bruno's troubles with the church are great - none of the usual "martyrs for science!" stuff, more (correct) focus on political and theological problems here. The history of scientists has, weirdly enough, quite a few arians in it.

- Gribbin goes through great pain to make it clear that to become "a name" in the history of science, it's often not some mythological personal genius, but luck of being the right hard-working person at the right position at the right time. He often details the people who also made the important discovery at the same time as the "famous" discoverer made it, but for some reason, have been forgotten by history.

- Fallopian tubes are called "tubes" even though Fallopio originally described them as "brass trumpets", i.e., *tubas* - "tubes" is a mistranslation.

- Gribbin is no fan of Newton - although his discoveries were manifold and important, his rather extreme personality made work for other scientists very hard, and the cult of Newton's personality after Newton's death kept progress in some areas of science behind. Gribbin correctly points out that Newton didn't receive the knighthood for his scientific advances, but as "a rather grubby bit of political opportunism by Halifax as part of his attempt to win the election of 1705".

- Especially towards the end this book gets more dry, almost as if Gribbin had a deadline coming up and slogged through writing it

- Dalton discovered colour blindness, as he himself suffered from it. Imagine making that discovery!!

- Gribbin's not a big fan of Kuhnian scientific revolutions, as the structure and the afterword of this book make it clear. To him, scientific progress is developed "essentially incremental, step-by-step".

Recommended for: Scientists, people interested in history or the history of science

---

### ????????? ???? says

??? ?????? ?????? ?? ????? ???? ????? ?????? ????? ?????? ?? ???? ????? ???????????.
????? ?? ???? "??????? ????" ??????? (???? ?????) ????? ???? ?????? ????? ???????? ?????? (??????) . ????? ?????? ???? ???????? ??????? ??? ?? ?????? ??? ??? ??? ?????? ????? ??????? ?????? ??????? ????? ??????? ????? ????? ???? ??????? ????? ??? ??? ??????? .
????? ????? ??? ????? ??? ??????? ?? ????? ????? ? ??? ???? ?????? "????" ?? ???? ?? ????? ??????.
???? ??? ?????? ????? ???? ????? ?? ??????? ??????? ????? ???????? ??? ???? ??? ?????? ?????? ????? ?? ???????? ???? ???? ??????? ??????? ?? ??? ?????? ????? ?????? (????? 800 ????) . ??? ??? ?????? ??? ?????? ?? ??? ?? ???? ????""index ???? ????? ???? ??? ?????? ?? ?????. ??? ????? ??? ???? ????? ???? ?? ???? ..
??? ?????? ?? ?????? ???? ?? ??? ??? ??????? ???????? ????? ???? ?????? ?? ??????? ???????? ??? ??? ?????? ?????????? .
??? ??? ?? ?????? ????? ????? ????? ???????? ????? ????????? ??????? ?? ??? ????? ?????? ??? ?????? ??????? ???????? . ?? ??? ?? ??? ?????? ?? ?????? ??????? ???????.
??? ?? ?????? ???? ????? ?? ???? ?????? ????????? ??????? ??? ???? ???? ??????? ??????? ????? ??????? ???????? .
??? ?????? ????? ???? ????? ?? ??? ???? ??????? ????? ??? ???? ??. ??? ??? ??? ?? ??? ?????? ???? ????? .

---

### ???? says

????! ??? ?? ??????? ?? ?????? ?? ?????? ?? ????? ????? ??????????? ??????? ??????? ??????? ??? ?? ?????? ??? ?????? ????? ??? ?????? ??????? ??? ???? ??????? ???? ??????? ??????? ???? ???? ?????????? ??????? ???????? ??????? ??? ?????? ????? ??? ???? ??????? ??? ?????? ?? ?????????? ??????.

????? ?????? ??????? ??????? ?????? ????? ??????? ????? ?????? ????? ???? ?? ?????? ?????? ????? ????? ??????? ???? ??????? ????? ?????? ??? ????? ???? ??? ?? ??? ???????? ????????? :@

?????? ?????? ??? ?? ????? ???? ???? ???? ??? ?????????? ???? ?????? ????.

---

### Abdelrahman Elshamy says

???? ???? ?????? ??? ??????? ????? ???? ?? ?? ???? ???? ??? ?? ?????? ?? ???? ??????? , ??? ???? ?? ????? ?????? ???? ???? ????? ????? ?? ????? ???? ?????? ????? , ???? ???? ????? ??????? ?????? ??????? ???? ??????? ??? ??????.

?????? ???? ??????? ????? ???????? ??? ?? ?? ?? ???? ?? ???? ?? ?????? ?? ???? ????? ?????? ??????? ??????? ?????? ??? ?????? , ??? ??? ?????? ??? ??? ???? ??????? ????????? ?? ??????? ????? ????? ????? ?? ?????? ?? ????? ???? ????? ????? ?? ???? ??? ???? ?????? ???? , ?????????? ??????? ???? ??? ??????? ??? ???? ????? ?????? ?? ?????? ??????? ???????? ??????? ?? ???? ???????? ?????????? ???????? , ?? ???? ??? ??? ?? ?????? ?????? ??????? ??????? ?????? ???? ?????? ???? ?????.

???? ?????? ?? ???? ????? ????? ??????? ??????? ????? ??????? ?????? ?? ????? ????? ?????? ?? ????? 1543 , ??? ????? ??? ????? ????? ?????? ??? ???? ?? ??? ????? ??????? ?????? ?????? ???????? ????? ????? ??????? ?? ????? ?? ????? , ???? "?? ????? ??????? ????????" ?????????? ? "???? ??? ???????" ????????? , ?????? ??? ????? ?????? ????? ?????? ??? , ??????? ?? ???? ?????? ??? ?????? ????? ??? ????? ????? ?????? ????????.

?????? ?? ????? ??? ?????? , ???? ?? ????? ?????????? ??????? ??????? ???? ?? ?????? ???? ???? ??????? , ???? ???? ????? ??? ????? ???? ??? ???? ???? ????? ?????? ????????? ?????? ???????? ???? ???? ????? ?????? ?? ?????? ?????? ?????? ?????? ???????.

---

### Alex says

Overview books are tricky, and most fail. Many things have happened, y'know? And a book that includes a great deal of them often turns into...well, into a list of things that have happened. This is why all textbooks suck.

So one has to pick and choose, and the choice necessarily creates a perspective. You've picked up these select threads, which leaves you inevitably with that picture. And the trick in writing a good overview book is to end up with a picture that's interesting, compelling, and most of all, coherent.

I only read 100 pages of Gribbin's book and then set it down, because I have this complicated reading schedule and it called for these 100 pages and then something else. I'll come back to the rest later, when it arrives on my mental syllabus. But so far, I think Gribbin is picking the right threads. I like the line he draws from William Gilbert, of whom I'd never heard, to Galileo. It was neat; I liked learning about Gilbert, and I liked his take on Galileo. He's fussy about who he chooses to mention, and how much, and in relation to whom else, and it's working for me.

I look forward to getting back to this. I even have hopes of bumping it up to five stars when it's all over.

---

### Blair says

I started out loving this book, it gave glimpses into the men who helped form science. When we approached the modern era, a time when some of the scientists discussed are still alive possibly, the tone changed... the book stopped being about the people and more only about the science. It was this change that threw me off... I suppose there is a valid reason to not continue the quirks to include something like Richard Dawkins has had a propensity to wear short shorts in public places (which I have witnessed), but it was precisely that the insights into scientists like Newton and Linnaeus were so fascinating to me.
Plus the soap box on the end about how sociologists and historians malign science by not giving it its merited status and instead "consider" it as not quite theory and merely subject to the whims of people... I thought that was unnecessary.

---

### ??? says

?? ?????? ????? ?????? ?????? ?????? ?? ???? ?????? ????? ?????? ???? ?????? ???? ?? ??????? ??????? ?? ???????? ??? ???? ??????? ?? ????? ??? ?????? ?? ??????? ??????? (?? ???? ????? ???? ????? ?????? ????? ???? ?????)? ?? ???? ?? ???? ?? ?????? ??? ?????? ???????? ???? ???? ??? ?? ???? ?? ????? ???? ?? ???? ?? ????? ????? ??? ?????? ?????? ??? ??? ?????? ??? (??? ?????) ??????? ????? ????? ??????.
?????? ???? ????? ?? ?? ??? ??????? ?? ????? ????? ?????? ?? (?????) ??????? ??????? ??? ???? ?? ????.
???????? ????? ???? ????
?????? ??? ?? ????????