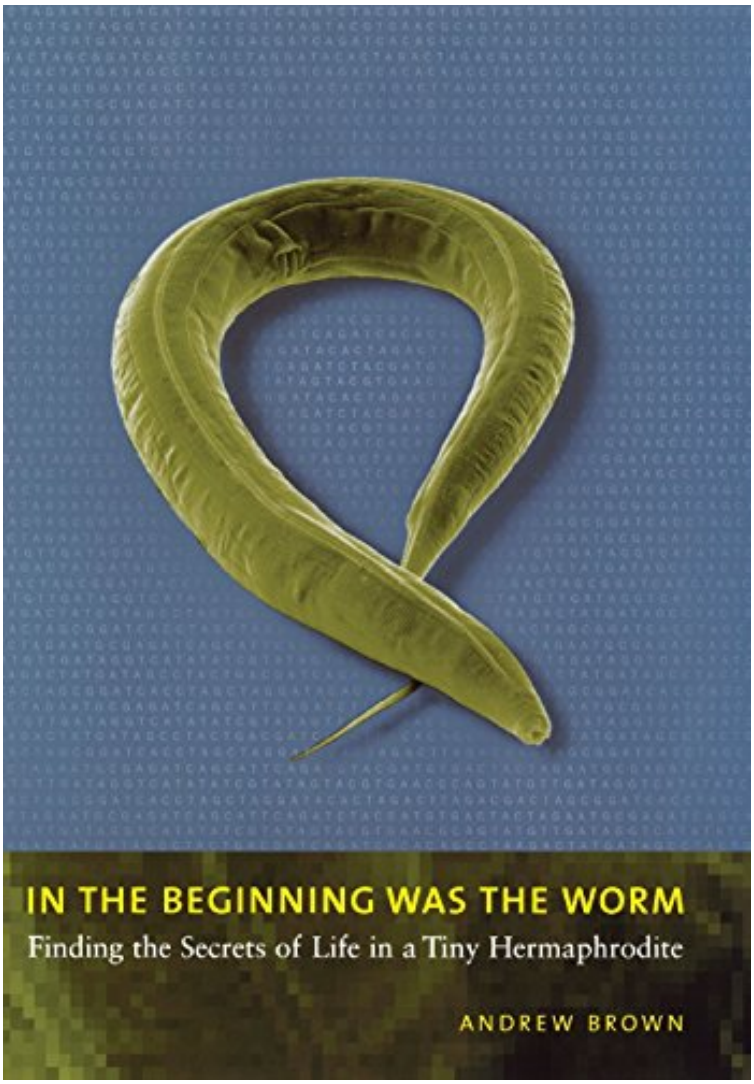
In the Beginning Was the Worm: Finding the Secrets of Life in a Tiny Hermaphrodite

Andrew Brown
*DOC | *audiobook | ebooks | Download PDF | ePub*



#3282977 in Books Andrew Brown 2003-07-15Ingredients: Example IngredientsOriginal language:EnglishPDF # 1 9.02 x .75 x 5.98l, .91 #File Name: 0231131461248 pagesIn the Beginning Was the Worm Finding the Secrets of Life in a Tiny Hermaphrodite | File size: 62.Mb

Andrew Brown : In the Beginning Was the Worm: Finding the Secrets of Life in a Tiny Hermaphrodite before purchasing it in order to gage whether or not it would be worth my time, and all praised In the Beginning Was the Worm: Finding the Secrets of Life in a Tiny Hermaphrodite:

0 of 0 people found the following review helpful. Sleeper Story of an Earth-Shaking DiscoveryBy Wayne H. MackirdyA sleeper, earth-shaking story. It is way more important than it might seem. This is the story of three

scientists who made one of the most important scientific discoveries in the history of modern science. And it is possible they don't even realize it. Foundational to the Theory of Evolution is the concept of mutation - in simple terms, copying errors from generation to generation in all living things, plant and animal. Yet, this is a story of the discovery of information management. Huh? DNA carries information...although some would deny it. And, according to Dr Werner Gitt, the only known source of information is a mind. But, how is that information managed, as in c.elegans? How does a living thing get from the first fertilized cell to the full-grown living thing? Is it left to chance? Is it random? Or, is it directed? This is the background story for an amazing discovery that blows holes in the chance development of living things. You might want to watch this video for a synopsis of the discovery. [...]2 of 4 people found the following review helpful. Genetics from Small BeginningsBy Allan M. LeesWhy do we grow old and die? Amazingly, after more than forty years of research, we still don't know the answers. This book charts the history of one branch of investigation into this thorny problem and does it with verve, style, and wit. In addition it is written with an admirable clarity that will enable non-specialists to grasp not only what was going on during the 30 years people have been studying c. elegans but also why it matters.The main omission of the book concerns the fact that unlike complex eukaryotes such as reptiles and mammals our small wormy friend does not undergo cell division. Therefore cell-division-related loss-of-information theories about senescence clearly cannot explain why c. elegans lasts less than a month even under ideal conditions. In principle the fact that this non-dividing cellular system actually does grow old and die should teach us something very important about the mechanisms of aging, but alas we are little closer to understanding why these tiny creatures age than we were when the whole enterprise started with Brenner's initial investigations. It would presumably be very illuminating to contrast the all-too-mortal worm with immortal cancer cell lines; somewhere in there are surely the clues we need to get a better understanding of what it means to age.But this book is a nice primer on the basic issues involved in the study of aging and as such is a welcome addition to the bookshelf.0 of 0 people found the following review helpful. in the eyes of scrutinyBy Stephen PellerineIf you are looking for a book on either the C. elegan or the beginnings of genome sequencing this is a great book - a 5 star plus. It is also an interesting, very much so, on just good biology and the evolution of it.It may be too much for those without an intrinsically keen interest in science, but since you have made it to this page (and this review) you are probably in this category.For me, the best is how the book is written. Easy to read and follow reading like a good non-f should, but informative at the same time. I came away from this book with a wide range of new perspectives and connections I could have never thought of before. I love science, and biology, but felt as if I was reading from a new plane here. You can not only learn what was done but the passion scientists had in following their visions - even in the eyes of scrutiny. Sometimes it pays off.

This is the story of how three men won the Nobel Prize for their research on the humble nematode worm C. elegans; how their extraordinary discovery led to the sequencing of the human genome; how a global multibillion-dollar industry was born; and how the mysteries of life were revealed in a tiny, brainless worm.In 1998 the nematode wormperhaps the most intensively studied animal on earthwas the first multicellular organism ever to have its genome sequenced and its DNA mapped and read. "When we understand the worm, we will understand life," predicted John Sulston, one of the three Nobel laureates, and his prediction proved astonishingly accurate. Four years later, the research that led to this extraordinary event garnered three scientists a Nobel Prize. Along with Robert Horvitz and Sydney Brenner, Sulston discovered the phenomenon of programmed cell death in the worm, an essential concept that explains how biological development occurs in animal life and, as Horvitz later showed, how it occurs in human life. C. elegans is about as simple as an animal can be, but understanding its genetic organization is helping to reveal the mechanisms of life and, by extension, the mechanisms of our own lives. In the Beginning Was the Worm shows that in order to unlock the secrets of the human genome we must first understand the worm. But this story is about more than just the worm. It is about how an eccentric group of impassioned scientists toiled in near anonymity for years, driven only by a deep passion for knowledge and scientific discovery. It is the story of countless hours of research, immense ambition, and one of the greatest discoveries in human history.

Brown's book traces the worm project from its inception, as fascinating for the obsessive, almost nerd-like quality of the researchers as for the unravelling of the worm's wormliness. (Guardian)Brownan award-winning religious affairs journalist and the author of The Darwin Wars (1999)is at his best when telling the human story behind the scientific work. (Telegraph)[Brown] illustrates how the story of the worm stretches across the history of molecular biology and the understanding of biological development in animals, from worms to people. (Science News)What Brown does remarkably well in In the Beginning is to convey the passion, idealism, and cooperative spirit of the early worm workers. (Science Magazine)Brown should be commended for making what may seem to be obscure, esoteric science both accessible and exciting. (Rachel A. Ankeny American Scientist)In an era when scientific storytelling has become commonplace, this book stands out for its lesson on independent thought.... Brown clearly relates the perseverance and vision of the first generation of worm scientists that led to these accomplishments. (Catherine A. Wolkow and Mark P. Mattson Journal of Clinical Investigation)[Brown's] experience in communicating science to the layman serves him

well in this new account. Recommended... all levels. (Choice)About the AuthorAndrew Brown is a journalist who writes extensively for the Guardian, the Independent, and the Daily Mail. He is the author of two acclaimed books: Watching the Detectives and The Darwin Wars.