

 Get Print Book

Connectome: How the Brain's Wiring Makes Us Who We Are

By Sebastian Seung



Download



Read Online

Connectome: How the Brain's Wiring Makes Us Who We Are By Sebastian Seung

“This is complicated stuff, and it is a testament to Dr. Seung’s remarkable clarity of exposition that the reader is swept along with his enthusiasm, as he moves from the basics of neuroscience out to the farthest regions of the hypothetical, sketching out a spectacularly illustrated giant map of the universe of man.”—Abigail Zuger, M.D., *New York Times*

Every person is unique, but science has struggled to pinpoint where, precisely, that uniqueness resides. Our genome may determine our eye color and even aspects of our character. But our friendships, failures, and passions also shape who we are. The question is: how?

Sebastian Seung is at the forefront of a revolution in neuroscience. He believes that our identity lies not in our genes, but in the connections between our brain cells—our particular wiring. Seung and a dedicated group of researchers are leading the effort to map these connections, neuron by neuron, synapse by synapse. It’s a monumental effort, but if they succeed, they will uncover the basis of personality, identity, intelligence, memory, and perhaps disorders such as autism and schizophrenia.

Connectome is a mind-bending adventure story that presents a daring scientific and technological vision for understanding what makes us who we are, both as individuals and as a species.

“Accessible, witty, imminently logical and at times poetic, *Connectome* establishes Seung as an important new researcher, philosopher and popularizer of brain science. It puts him on par with cosmology’s Brian Greene and the late Carl Sagan.”—*Cleveland Plain Dealer*



[Download Connectome: How the Brain's Wiring Makes Us W ...pdf](#)



[Read Online Connectome: How the Brain's Wiring Makes Us ...pdf](#)

Connectome: How the Brain's Wiring Makes Us Who We Are

By Sebastian Seung

Connectome: How the Brain's Wiring Makes Us Who We Are By Sebastian Seung

“This is complicated stuff, and it is a testament to Dr. Seung’s remarkable clarity of exposition that the reader is swept along with his enthusiasm, as he moves from the basics of neuroscience out to the farthest regions of the hypothetical, sketching out a spectacularly illustrated giant map of the universe of man.”—Abigail Zuger, M.D., *New York Times*

Every person is unique, but science has struggled to pinpoint where, precisely, that uniqueness resides. Our genome may determine our eye color and even aspects of our character. But our friendships, failures, and passions also shape who we are. The question is: how?


Sebastian Seung is at the forefront of a revolution in neuroscience. He believes that our identity lies not in our genes, but in the connections between our brain cells—our particular wiring. Seung and a dedicated group of researchers are leading the effort to map these connections, neuron by neuron, synapse by synapse. It’s a monumental effort, but if they succeed, they will uncover the basis of personality, identity, intelligence, memory, and perhaps disorders such as autism and schizophrenia.

Connectome is a mind-bending adventure story that presents a daring scientific and technological vision for understanding what makes us who we are, both as individuals and as a species.

“Accessible, witty, imminently logical and at times poetic, *Connectome* establishes Seung as an important new researcher, philosopher and popularizer of brain science. It puts him on par with cosmology’s Brian Greene and the late Carl Sagan.”—*Cleveland Plain Dealer*

Connectome: How the Brain's Wiring Makes Us Who We Are By Sebastian Seung Bibliography

- Sales Rank: #483997 in Books
- Published on: 2013-02-05
- Released on: 2013-02-05
- Original language: English
- Number of items: 1
- Dimensions: 8.00" h x .89" w x 5.31" l, .75 pounds
- Binding: Paperback
- 384 pages

 [Download Connectome: How the Brain's Wiring Makes Us W ...pdf](#)

 [Read Online Connectome: How the Brain's Wiring Makes Us ...pdf](#)

Download and Read Free Online **Connectome: How the Brain's Wiring Makes Us Who We Are** By Sebastian Seung

Editorial Review

Review

Wall Street Journal's 10 Best Nonfiction Books of 2012

Amazon's Top 100 Editor's Picks for 2012

Publishers Weekly Top Ten in Science for Spring 2012

“*The best lay book on brain science I’ve ever read.*”

— **Wall Street Journal** by **Daniel Levitin**, Professor, McGill University; author of *This Is Your Brain on Music* and *The World in Six Songs*.

“?This is complicated stuff, and it is a testament to Dr. Seung’s remarkable clarity of exposition that the reader is swept along with his enthusiasm, as he moves from the basics of neuroscience out to the farthest regions of the hypothetical, sketching out a spectacularly illustrated giant map of the universe of man.”

— **New York Times**

“[A] bracing, mind-expanding report from neuroscience’s razor edge. Accessible, witty, [e]minently logical and at times poetic, *Connectome* establishes Seung as an important new researcher, philosopher and popularizer of brain science. It puts him on par with cosmology’s Brian Greene and the late Carl Sagan.”

— **Cleveland Plain Dealer**

“Seung argues intelligently and powerfully that the self lies in the totality of the brain’s wiring.”

— **Nature** by **Christof Koch**, Professor, California Institute of Technology; Chief Scientific Officer, Allen Institute for Brain Science; author of *Quest for Consciousness* and *Consciousness: Confessions of a Romantic Reductionist*

“With the first-person flavour of James Watson’s *Double Helix*—an account of how DNA’s structure was discovered—*Connectome* gives a sense of the excitement on the cutting edge of neuroscience.”

— **NewScientist** by **Terry Sejnowski**, Professor and Director, Computational Neurobiology Lab, Salk Institute; Investigator, Howard Hughes Medical Institute; Member, National Academy of Sciences and National Academy of Engineering USA.

“An elegant primer on what’s known about how the brain is organized and how it grows, wires its neurons, perceives its environment, modifies or repairs itself, and stores information. Seung is a clear, lively writer who chooses vivid examples.”

— **Washington Post**

“Sebastian Seung scales the heights of neuroscience and casts his brilliant eye around, describing the landscape of its past and boldly envisioning a future when we may understand our own brains and thus ourselves.”

—**Kenneth Blum, Executive Director, Center for Brain Science, Harvard University**

“Sebastian Seung can do it all. He’s widely recognized as a superb physicist, a whiz with computers, and a path-breaking neuroscientist. *Connectome* shows that he's also a terrific writer, as inspiring as he is clear and

good humored.”

—**Steven Strogatz, Cornell University, author of *Sync: the Emerging Science of Spontaneous Order***

“In *Connectome*, Sebastian Seung reminds us that the human brain has contemplated itself for centuries. This is an important book, full of refreshingly new science and engaging history, about the essential quest to understand ourselves.”

—**Phillip A. Sharp, MIT, 1993 Nobel Prize in Physiology or Medicine**

“A landmark work, gorgeously written. No other researcher has traveled as deeply into the brain forest and emerged to share its secrets.”

—**David Eagleman, author of *Incognito* and *Sum***

“Connectomics is emerging as a crucial and exhilarating field of study. Sebastian Seung takes you by the hand and shows you why. *Connectome* is a page turner—a book that should be read by anyone who lays claim to be thinking about the nature of life.”

—**Michael Gazzaniga, University of California at Santa Barbara and author of *Human and The Ethical Brain***

Review

Publishers Weekly Top Ten in Science for Spring 2012

“the best lay book on brain science I’ve ever read.” — *Wall Street Journal* by Daniel Levitin, Professor, McGill University; author of *This Is Your Brain on Music* and *The World in Six Songs*.

“?This is complicated stuff, and it is a testament to Dr. Seung’s remarkable clarity of exposition that the reader is swept along with his enthusiasm, as he moves from the basics of neuroscience out to the farthest regions of the hypothetical, sketching out a spectacularly illustrated giant map of the universe of man.” — *New York Times*

“[A] bracing, mind-expanding report from neuroscience’s razor edge. Accessible, witty, [e]minently logical and at times poetic, *Connectome* establishes Seung as an important new researcher, philosopher and popularizer of brain science. It puts him on par with cosmology’s Brian Greene and the late Carl Sagan.” — *Cleveland Plain Dealer*

“Seung argues intelligently and powerfully that the self lies in the totality of the brain’s wiring.” — *Nature* by Christof Koch, Professor, California Institute of Technology; Chief Scientific Officer, Allen Institute for Brain Science; author of *Quest for Consciousness* and *Consciousness: Confessions of a Romantic Reductionist*

“With the first-person flavour of James Watson’s *Double Helix*—an account of how DNA’s structure was discovered—*Connectome* gives a sense of the excitement on the cutting edge of neuroscience.” — *NewScientist* by Terry Sejnowski, Professor and Director, Computational Neurobiology Lab, Salk Institute; Investigator, Howard Hughes Medical Institute; Member, National Academy of Sciences and National Academy of Engineering USA.

“an elegant primer on what’s known about how the brain is organized and how it grows, wires its neurons, perceives its environment, modifies or repairs itself, and stores information. Seung is a clear, lively writer who chooses vivid examples.” — *Washington Post*

From the Inside Flap

The bold and thrilling quest to finally understand the brain

We know that each of us is unique, but science has struggled to pinpoint where, precisely, our uniqueness resides. Is it in our genes? The structure of our brains? Our genome may determine our eye color and even aspects of our personality. But our friendships, failures, and passions also shape who we are. The question is: how?

Sebastian Seung, a dynamic professor at MIT, is on a quest to discover the biological basis of identity. He believes it lies in the pattern of connections between the brain's neurons, which change slowly over time as we learn and grow. The connectome, as it's called, is where our genetic inheritance intersects with our life experience. It's where nature meets nurture.

Seung introduces us to the dedicated researchers who are mapping the brain's connections, neuron by neuron, synapse by synapse. It is a monumental undertaking—the scientific equivalent of climbing Mount Everest—but if they succeed, it could reveal the basis of personality, intelligence, memory, and perhaps even mental disorders. Many scientists speculate that people with anorexia, autism, and schizophrenia are “wired differently,” but nobody knows for sure. The brain's wiring has never been seen clearly.

In sparklingly clear prose, Seung reveals the amazing technological advances that will soon help us map connectomes. He also examines the evidence that these maps will someday allow humans to “upload” their minds into computers, achieving a kind of immortality.

Connectome is a mind-bending adventure story, told with great passion and authority. It presents a daring scientific and technological vision for at last understanding what makes us who we are. Welcome to the future of neuroscience.

Users Review

From reader reviews:

Carrie Porter:

What do you ponder on book? It is just for students as they are still students or it for all people in the world, the particular best subject for that? Simply you can be answered for that question above. Every person has various personality and hobby per other. Don't to be pressured someone or something that they don't wish do that. You must know how great and also important the book *Connectome: How the Brain's Wiring Makes Us Who We Are*. All type of book can you see on many sources. You can look for the internet methods or other social media.

Kendrick Mills:

In this 21st millennium, people become competitive in every single way. By being competitive now, people have do something to make these survives, being in the middle of the particular crowded place and notice by surrounding. One thing that often many people have underestimated it for a while is reading. Yes, by reading a e-book your ability to survive boost then having chance to stand up than other is high. For you personally who want to start reading any book, we give you this *Connectome: How the Brain's Wiring Makes Us Who We Are* book as beginning and daily reading publication. Why, because this book is greater than just a book.

Kim Adams:

Connectome: How the Brain's Wiring Makes Us Who We Are can be one of your nice books that are good idea. Many of us recommend that straight away because this e-book has good vocabulary that can increase your knowledge in vocab, easy to understand, bit entertaining but still delivering the information. The article writer giving his/her effort to set every word into enjoyment arrangement in writing Connectome: How the Brain's Wiring Makes Us Who We Are yet doesn't forget the main stage, giving the reader the hottest and based confirm resource data that maybe you can be considered one of it. This great information can certainly drawn you into completely new stage of crucial imagining.

Della Francis:

Reading a book to become new life style in this yr; every people loves to study a book. When you study a book you can get a wide range of benefit. When you read guides, you can improve your knowledge, mainly because book has a lot of information in it. The information that you will get depend on what types of book that you have read. If you want to get information about your examine, you can read education books, but if you want to entertain yourself read a fiction books, this sort of us novel, comics, as well as soon. The Connectome: How the Brain's Wiring Makes Us Who We Are provide you with a new experience in reading a book.

Download and Read Online Connectome: How the Brain's Wiring Makes Us Who We Are By Sebastian Seung #5J8PCNRO2UV

Read Connectome: How the Brain's Wiring Makes Us Who We Are By Sebastian Seung for online ebook

Connectome: How the Brain's Wiring Makes Us Who We Are By Sebastian Seung Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Connectome: How the Brain's Wiring Makes Us Who We Are By Sebastian Seung books to read online.

Online Connectome: How the Brain's Wiring Makes Us Who We Are By Sebastian Seung ebook PDF download

Connectome: How the Brain's Wiring Makes Us Who We Are By Sebastian Seung Doc

Connectome: How the Brain's Wiring Makes Us Who We Are By Sebastian Seung Mobipocket

Connectome: How the Brain's Wiring Makes Us Who We Are By Sebastian Seung EPub