Explorers of the Black Box: The Search for the Cellular Basis of Memory

Susan Allport
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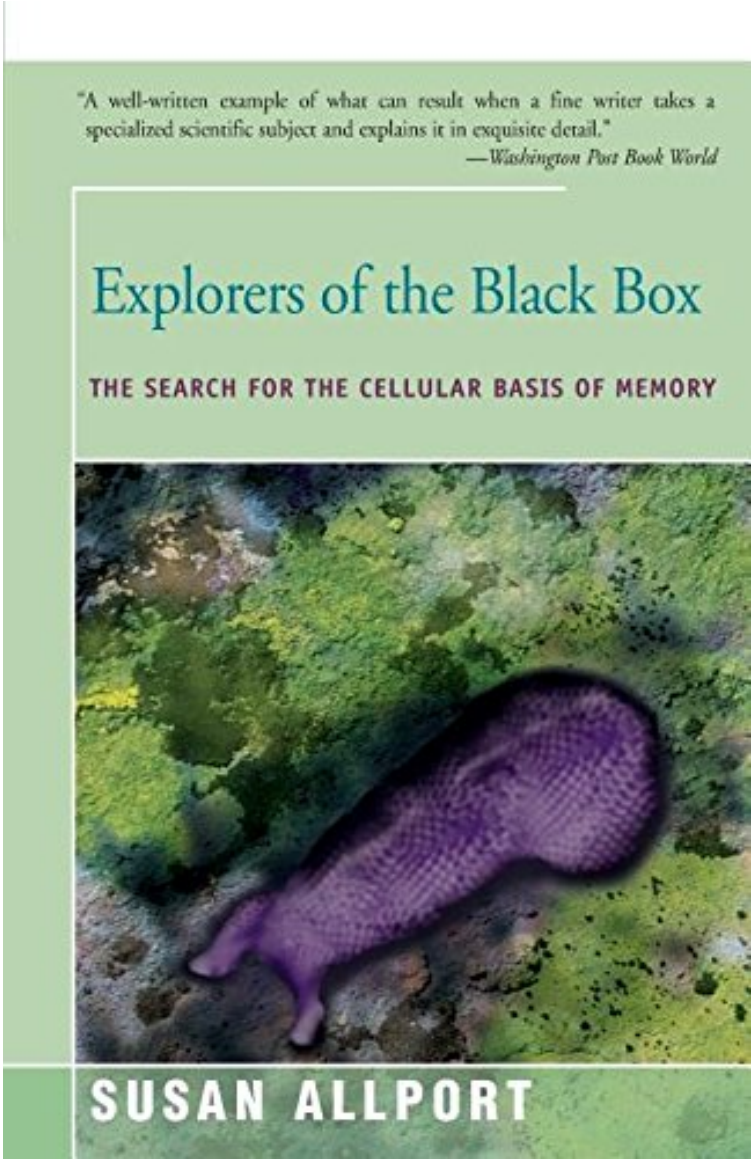

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Susan Allport : Explorers of the Black Box: The Search for the Cellular Basis of Memory before purchasing it in order to gage whether or not it would be worth my time, and all praised Explorers of the Black Box: The Search for the Cellular Basis of Memory:

Explorers of the Black Box is a scientific adventure story. The "Black Box" is the brain. The "Explorers" are neuroscientists in search of how nerve cells record memories, and they are as ruthless and dauntless as any soldiers of fortune. The book centers around the early, often-controversial research Nobel Prize-winner Eric Kandel. It takes readers behind the scenes of laboratories at Woods Hole, Columbia, Yale, and Princeton to create an absorbing account of how the brain works and of how science itself works.

From Publishers WeeklyWhen today's neuroscientists turn from their lab work to discuss distinctions between such terms as "brain" and "mind," they betray how mysterious, subtle and indeterminate is their study of the human brain. Allport, herself one of the "explorers of the black box" (she has worked at the Massachusetts Woods Hole Marine Biological Lab), makes clear the reasons why there is such excitement in this new field. Psychiatry has gone just so far, while the Pavlovian behaviorism of the past century, itself at an impasse, has given way to an experimental science using astonishing techniques. Allport's history of the study of the brain, from the time of the first Golgi stain (of a slice of tissue) through Adrian's discovery of brain "spikes" in 1925 to Eric Kandel's experiments on the sea-snail Alypsia (beginning at Woods Hole in the 1960s), makes wondrous if challenging reading. Students and serious readers will study Allport profitably. From Library JournalA freelance journalist's provocative report on research on the cellular basis of learning memory. Using microelectrodes to "talk" with the cells of simple experimental animals, scientists have concluded that learning involves chemical changes in the junctions between cells or within cell membranes. Allport's discussion of complex biochemical mechanisms will be demanding reading for the nonscientist. Even casual readers, however, will be engrossed by her revealing portraits of two highly competitive neurobiologists. According to Allport, personalities and politics mightily influence who gets funded, who gets published, and who gets the ultimate recognition. Her description of the climate surrounding scientific research will be controversial. Laurie Bartolini, formerly with Lincoln Lib., Springfield, Ill.