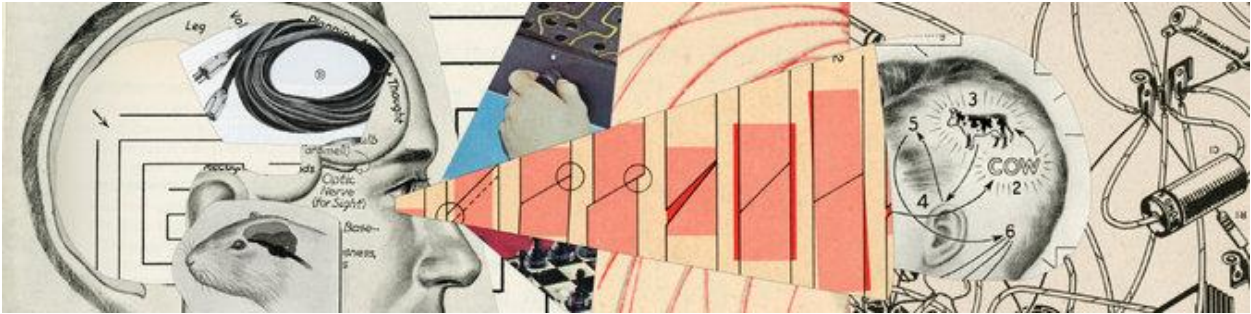


***NYT SUNDAY BOOK REVIEW* | Neuroscience**



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Neuroscience

‘The Teenage Brain,’ and More

By AMANDA SCHAFFER

APRIL 3, 2015

A Neuroscientist’s Survival Guide to Raising Adolescents and Young Adults

By Frances E. Jensen with Amy Ellis Nutt

358 pp. Harper/HarperCollins, \$27.99.

How is it that a delightful child can turn overnight into a sullen, explosive, risk-taking adolescent? Jensen, a neurologist and mother of two sons, and Nutt, a Washington Post science writer, explore the biology of the teenage brain, in an effort to demystify teenage behavior for overwhelmed parents.

The good news is that adolescents are primed to learn. They tend to form memories more readily than adults do, and those memories seem to persist longer. The bad news is that because teenagers are so well equipped to learn, “they are also exceedingly vulnerable to learning the wrong things,” Jensen and Nutt write. The reward centers of their brains respond in heightened fashion to the neurotransmitter dopamine, which may explain why they are particularly vulnerable to addiction. Their brain wiring is also not yet fully insulated, or myelinated, which means that some of its signaling remains inefficient. Their frontal lobes, which are responsible for judgment and decision making, are among the last areas to complete myelination, meaning that they may still have “trouble linking up” with other parts of the brain. This could be why teenagers “sometimes find themselves in dangerous situations, not knowing what they should do next.”

Jensen and Nutt pull no punches when it comes to these dangers. At times they practically batter the reader with cautionary tales, and they argue that parents should do the same with their children: Since their brains are relatively immature, “you have to stuff their minds with real stories, real consequences,” they write, “even when they complain they’ve heard it all before.”

The authors also urge parents to talk with kids about their brains' shortcomings. Jensen says she convinced her own sons that they couldn't actually multitask effectively by showing them data on word recall and distracted attention. (She reproduces a graph of this data, should others wish to do the same.) It's charming to see good science translate directly into good parenting, whether or not the results can be broadly replicated.