

Subcortical Structures and Cognition (Hardback)

By Leonard F. Koziol, Deborah Ely Budding, Andrew Suth

Springer-Verlag New York Inc., United States, 2009. Hardback. Book Condition: New. 234 x 160 mm. Language: English . Brand New Book. Clinical psychologists and neuropsychologists are traditionally taught that cognition is mediated by the cortex and that subcortical brain regions mediate the coordination of movement. However, this argument can easily be challenged based upon the anatomic organization of the brain. The relationship between the prefrontal cortex/frontal lobes and basal ganglia is characterized by loops from these anterior brain regions to the striatum, the globus pallidus, and the thalamus, and then back to the frontal cortex. There is also a cerebrocerebellar system defined by projections from the cerebral cortex to the pontine nuclei, to the cerebellar cortex and deep cerebellar nuclei, to the red nucleus and then back to thalamus and cerebral cortex, including all regions of the frontal lobes. Therefore, both the corticalstriatal and cortical-cerebellar projections are anatomically defined as re-entrant systems that are obviously in a position to influence not only motor behavior, but also cognition and affect. This represents overwhelming evidence based upon neuroanatomy alone that subcortical regions play a role in cognition. The first half of this book defines the functional neuroanatomy of corticalsubcortical circuitries and establishes...



Reviews

A very great ebook with perfect and lucid answers. It can be packed with wisdom and knowledge I found out this book from my dad and i encouraged this publication to learn.

-- Elena McLaughlin

It is an amazing publication which i actually have at any time go through. It really is writter in easy words and phrases rather than hard to understand. Its been developed in an extremely easy way which is merely following i finished reading through this pdf in which actually changed me, affect the way i think. -- Garry Lind