Neuroscience of Attention: Attentional Control and Selection

This text addresses the basic neuroscience of how the brain controls the focus of attention, and how this focused attention influences sensory and motor processes. This volume will provide the reader with a selection of the models, mechanisms and findings in the neuroscience of attentional control and selection from leading authorities working in human and animal models, and incorporating a variety of neuroscience methods from single neuron recordings to functional brain imaging and advanced modeling.

The book begins with contributions that describe attentional selection, relying largely on evidence from attention in vision. Subsequent chapters address attentional control mechanisms in cortical and subcortical brain networks. Finally, the role of attention in action, short-term memory, and emotion are discussed.