Cognitive Neuroscience Editor's Pick 2021.pdf

**Decision Neuroscience - An Integrative Perspective**

Decision Neuroscience addresses fundamental questions about how the brain makes perceptual, value-based, and more complex decisions in non-social and social contexts. This book presents compelling neuroimaging, electrophysiological, lesional, and neurocomputational models in combination with hormonal and genetic approaches, which have led to a clearer understanding of the neural mechanisms behind how the brain makes decisions. The five parts of the book address distinct but inter-related topics and are designed to serve both as classroom introductions to major subareas in decision neuroscience and as advanced syntheses of all that has been accomplished in the last decade. Part I is devoted to anatomical, neurophysiological, pharmacological, and optogenetics animal studies on reinforcement-guided decision making, such as the representation of instructions, expectations, and outcomes; the updating of action values; and the evaluation process guiding choices between prospective rewards. Part II covers the topic of the neural representations of motivation, perceptual decision making, and value-based decision making in humans, combining neurcomputational models and brain imaging studies. Part III focuses on the rapidly developing field of social decision neuroscience, integrating recent mechanistic understanding of social decisions in both non-human primates and humans. Part IV covers clinical aspects involving disorders of decision making that link together basic research areas including systems, cognitive, and clinical neuroscience; this part examines dysfunctions of decision making in neurological and psychiatric disorders, such as Parkinson’s disease, schizophrenia, behavioral addictions, and focal brain lesions. Part V focuses on the roles of various hormones (cortisol, oxytocin, ghrelin/leptine) and genes that underlie inter-individual differences observed with stress, food choices, and social decision-making processes. The volume is essential reading for anyone interested in decision making neuroscience. With contributions that are forward-looking assessments of the current and future issues faced by researchers, Decision Neuroscience is essential reading for anyone interested in decision-making neuroscience. Provides comprehensive coverage of approaches to studying individual and social decision neuroscience, including primate neurophysiology, brain imaging in healthy humans and in various disorders, and genetic and hormonal influences on decision making Covers multiple levels of analysis, from molecular mechanisms to neural-systems dynamics and computational models of how we make choices Discusses clinical implications of process dysfunctions, including schizophrenia, Parkinson’s disease, eating disorders, drug addiction, and pathological gambling Features chapters from top international researchers in the field and full-color presentation throughout with numerous illustrations to highlight key concepts

**Frontiers in Synaptic Neuroscience - Editor's Pick 2021**

**Frontiers in Behavioral Neuroscience - Editor’s Pick 2021**

**Predictive Mechanisms of the Cerebello-Cerebral Networks**
Frontiers in Aging Neuroscience Editor’s Pick 2021

Frontiers in Cognitive Neuroscience

Frontiers in Cognitive Neuroscience is the first book of extensive readings in an exciting new field that is built on the assumption that “the mind is what the brain does,” and that seeks to understand how brain function gives rise to mental activities such as perception, memory, and language. The editors, a cognitive scientist and a neuroscientist, have worked together to select contributions that provide the interdisciplinary foundations of this emerging field, putting them into context, both historically and with regard to current issues. Fifty-five articles are grouped in sections that cover attention, vision, auditory and somatosensory systems, memory, and higher cortical functions. They range from Gazzaniga and Bogen’s discussion of functional effects of sectioning the cerebral commissure in man and Geschwind’s classic study of the organization of language in the brain, published in the 1960s, to contemporary investigations by Schiller and Logothetis on color-opponent and broad-band channels of the primate visual system and by Bekkers and Stevens on presynaptic mechanisms for long-term potentiation in the hippocampus. The editors have provided both a general introduction and introductions to each of the five major sections. Stephen Kosslyn is Professor of Psychology at Harvard University. Richard Andersen is Professor of Neuroscience and Director of the McDonnell-Pew Center for Cognitive Neuroscience at the Massachusetts Institute of Technology.

Motivation and Reward - Editors' Pick 2021

Brain and Art

Could we understand, in biological terms, the unique and fantastic capabilities of the human brain to both create and enjoy art? In the past decade neuroscience has made a huge leap in developing experimental techniques as well as theoretical frameworks for studying emergent properties following the activity of large neuronal networks. These methods, including MEG, fMRI, sophisticated data analysis approaches and behavioral methods, are increasingly being used in many labs worldwide, with the goal to explore brain mechanisms corresponding to the artistic experience. The 37 articles composing this unique Frontiers Research Topic bring together experimental and theoretical research, linking state-of-the-art knowledge about the brain with the phenomena of Art. It covers a broad scope of topics, contributed by world-renowned experts in vision, audition, somato-sensation, movement, and cinema. Importantly, as we felt that a dialog among artists and scientists is essential and fruitful, we invited a few artists to contribute their insights, as well as their art. Joan Miró said that “art is the search for the alphabet of the mind.” This volume reflects the state of the art search to understand neurobiological alphabet of the Arts. We hope that the wide range of articles in this volume will be highly attractive to brain researchers, artists and the community at large.

Functional and Neural Mechanisms of Interval Timing
Understanding temporal integration by the brain is expected to be among the premier topics to unite systems, cellular, computational, and cognitive neuroscience over the next decade. The phenomenon has been studied in humans and animals, yet until now, there has been no publication to successfully bring together the latest information gathered from

**Higher coffee intake prevents development of Alzheimer's disease: Study**
Coffee lovers there good news for you According to new research drinking higher amounts of coffee can make you less likely to develop Alzheimer disease ...

**Insights in Neuroinflammation and Neuropathy**
We are now entering the third decade of the 21st Century, and, especially in the last years, the achievements made by scientists have been exceptional, leading to major advancements in the ...

**Insights in Neurocognitive Aging and Behavior**
In the last years, the achievements made by scientists have been exceptional, leading to major advancements in the fast-growing field of Neurocognitive Aging and Behavior. Frontiers has organized a ...

**Investigating the Relationship Between Bilingualism and False Memories**
HSE University researchers have discovered that false information in one’s native and second languages contribute equally to the formation of false memories.

**Drinking coffee may reduce the risk of developing Alzheimer’s disease**
A new, long-term study suggests that drinking coffee could reduce people’s risk of developing Alzheimer’s disease.

**These Personality Traits May Make You More Prone to Problematic Binge-Watching**
A new study links a propensity to binge-watch TV shows with personality traits. Researchers found those who lack impulse control and emotional clarity are most likely to binge-watch a television ...

**JNNP Milestones in Neurology**
JNNP reached a significant milestone — 100 continuous years of publishing the innovations, medical breakthroughs and trailblazing studies that have made it the go-to journal across the clinical ...

**Frontiers in Psychology**
Frontiers in Psychology is an open access journal that aims at publishing ... borrowing questions from philosophy, methods from neuroscience and insights from clinical practice - all in the ...

**Orgasmic Meditation Produces Distinctive Changes to Brain Connectivity**
according to a study published in the journal, Frontiers in Psychology on Nov 11th. The study found significant changes in brain function in areas associated with sexual stimulation and also more ...

**Masimo Root® with a Multimodal Brain Monitoring Algorithm May Improve Postoperative Neurocognition in Elderly Patients**
(BUSINESS WIRE ) -- Masimo (NASDAQ: MASI) today announced the findings of a prospective study published in Frontiers in Aging Neuroscience ... and peer-reviewed journal articles.

**Girija Kaimal, EdD**
Our lab conducts research and evaluation studies that examine health outcomes of art therapy and arts-based interventions. In addition we evaluate psychosocial learning outcomes of school based ...
In 2010, he was appointed to the editorial board for the Child and Neurodevelopmental Psychiatry section of Frontiers in Psychiatry ... school students from impoverished rural communities. Journal of ...