

The Sage Handbook of
**Cognitive and Systems
Neuroscience**



Neuroscientific Principles, Systems and Methods

Edited by
Gregory J. Boyle
with
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Cognitive neuroscience is the interdisciplinary study of how cognitive and intellectual functions are processed and represented within the brain, which is critical to building understanding of core psychological and behavioural processes such as learning, memory, behaviour, perception, and consciousness. Understanding these processes not only offers relevant fundamental insights into brain-behavioural relations, but may also lead to actionable knowledge that can be applied in the clinical treatment of patients with various brain-related disabilities.

This Handbook focusses on the foundational principles, methods, and underlying systems in cognitive and systems neuroscience, as well as examining cutting-edge methodological advances and innovations.

Containing 34 original, state of the art contributions from leading experts in the field, this Handbook is essential reading for researchers and students of cognitive psychology, as well as scholars across the fields of neuroscientific, behavioural and health sciences.

Part 1: Background Considerations

Part 2: Neuroscientific Substrates and Principles

Part 3: Neuroanatomical Brain Systems

Part 4: Neural Dynamics and Processes

Part 5: Sensory-Perceptual Systems and Cognition

Part 6: Methodological Advances
