1. Record Nr. UNINA9910136807603321

Autore	Jason Robert Gerstner
Titolo	Sleep and Chronobiology in Plasticity and Memory
Pubbl/distr/stampa	Frontiers Media SA, 2016
Descrizione fisica	1 electronic resource (120 p.)
Collana	Frontiers Research Topics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Chronobiological mechanisms regulating time-of-day mediated behaviors, such as sleep and circadian rhythms, are thought to interact with and/or share cellular and molecular signaling cascades that shape synaptic plasticity and neural excitability. These same factors are also known to underlie events that govern higher-order cognitive processing, including learning and memory formation, and often through phylogenetically conserved pathways. This suggests that factors which contribute to adaptive responses to changing environmental stimuli are likely derived from basic evolutionarily ancient processes, and underscores the importance of using both invertebrate and vertebrate models to study the interaction of chronobiology and cognitive processing. This issue highlights current views along with original research on sleep and circadian features of plasticity and memory in multiple species, models, and systems.