

1. Record Nr.	UNINA9910298285803321
Titolo	Synaptic Tagging and Capture : From Synapses to Behavior // edited by Sreedharan Sajikumar
Pubbl/distr/stampa	New York, NY : , : Springer New York : , : Imprint : Springer, , 2015
ISBN	1-4939-1761-7
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (278 p.)
Disciplina	610 612.8 612.8042
Soggetti	Neurosciences Neurochemistry Neuroscience
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Differential role of CaMK in synaptic tagging and capture.- Compartmentalization of Synaptic Tagging and Capture -- Synaptic cooperation and competition: two sides of the same coin? -- Neurotrophin-dependent and -independent synaptic tagging and modulation of long-term potentiation: a quest for the associated signaling pathway(s) -- PKA Anchoring and Synaptic Tagging and Capture -- Activity-dependent protein transport as a synaptic tag -- mTOR and the Regulation of Translational Capacity in Late Forms of Synaptic Plasticity -- Dopaminergic Neuromodulation in Synaptic tagging and Capture -- From where? Synaptic Tagging Allows the Nucleus Not to Care -- BDNF and TrkB mediated signalling supports processes of metaplasticity and long-term memory formation -- Prescient Synapses: Gating Future Neuronal Consciousness Through Synaptic Tagging and Metaplasticity -- Metaplasticity of Synaptic tagging and Capture: Memory beyond the circle -- Emotional tagging and long-term memory formation -- The Behavioral Tagging hypothesis and its implications for long-term memory formation.
Sommario/riassunto	Serves as a comprehensive introduction and overview of synaptic

tagging and capture (STC) and covers the topic from molecular and cellular aspects to behavior. Circa 15 years ago the STC model was proposed to provide a conceptual basis for how short-term memories are transformed into long-term memories. Though the hypothesis remains unconfirmed due to technological limitations, the model is well consolidated and generally accepted in the field. Various researchers have investigated the cellular mechanisms for the formation of long-term memory using the STC model, but this is the first book-length treatments of STC. This volume features an introduction by Prof. Richard Morris and Prof. Cliff Abraham.
