1. Record Nr. UNINA9910571710903321 Autore Lana Daniele **Titolo** A study on cholinergic signal transduction pathways involved in short term and long term memory formation in the rat hippocampus: Molecular and cellular alterations underlying memory impairments in animal models of neurodegeneration / / Daniele Lana Firenze, Italy: .: Firenze University Press, . [2015] Pubbl/distr/stampa ©2015 Descrizione fisica 1 online resource (136 pages): illustrations Premio Tesi di dottorato Collana 616.8 Disciplina Nervous system - Degeneration Soggetti Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto Neurodegenerative processes alter neuronal and glial physiology and cause cognitive and mnemonic impairments. Aim of this PhD thesis is to investigate the involvement of the cholinergic system and the role of mTOR pathway in the mechanisms of memory encoding in the hippocampus and to study the pathophysiological processes at the base of the cognitive impairments in different experimental models of neurodegeneration: in particular normal brain aging, neuroinfiammation and chronic cerebral hypoperfusion. These mechanisms are studied focusing on the morpho-functional alterations in the neuron-astrocytemicroglia triad.