

1. Record Nr.	UNINA9910137196203321
Autore	Lachlan Thompson
Titolo	Developing stem cell-based therapies for neural repair / / topic editors Clare Parish and Lachlan Thompson
Pubbl/distr/stampa	Frontiers Media SA, 2015 France : , : Frontiers Media SA, , 2015
ISBN	9782889194025 (ebook)
Descrizione fisica	1 online resource (114 pages) : illustrations, charts
Collana	Frontiers Research Topics, , 1664-8714
Disciplina	616.02/774
Soggetti	Cytology Biology Health & Biological Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references.
Sommario/riassunto	Current pharmacotherapies and surgical intervention provide limited benefit in the treatment of neural injuries or halting disease progression and has resulted in significant hope for the successes of stem cell research. The properties of stem cells render them appropriate for cell replacement therapy, endogenous repair, disease modeling as well as high-throughput drug screening and development. Such applications will aide in increasing our knowledge and developing treatments for neurodegenerative disorders such as Parkinson's disease and Huntington's diseases as well as neural traumas including ischemic brain damage and traumatic brain injury. This Frontiers Research topic encouraged contributions from the general field of stem cell biology, with a particular emphasis on utilizing these cells to develop new therapies for neural repair. Related articles deal with issues such as: breakthroughs in stem cell proliferation/differentiation methodologies, using pluripotent and neural stem cells for transplantation and endogenous repair, the use of patient derived stem cells for disease modeling, using stem cells for drug discovery as well as the ethical issues related to the use of stem cells.

