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Sommario/riassunto	In the history of neuroscience it had long been a virtually axiomatic belief that the mature mammalian nervous system was hardwired and fixed. This view goes back to the work of Louis Broca in the 1850s and has been perhaps most famously articulated by Ramon y Cajal. The immature nervous system was thought to have considerable plasticity, but after maturity the CNS was not considered to be capable of repairing itself after damage. In the last two decades, however, persuasive evidence has been accumulating at an increasing rate that the plasticity of the nervous system persists throughout the lifespan. Beginning 14 years ago, an efficacious form of neurorehabilitation termed Constraint-Induced Movement therapy or CI therapy was shown to produce marked neuroplastic changes in the brain. It has been proposed that CI therapy harnesses neuroplasticity in the service of restoring motor and language function lost as a result of such injuries

to the central nervous system as stroke, traumatic brain injury, and cerebral palsy. The proposed journal issue will include articles by the main investigators involved in the development of this body of research. There will also be articles on the role of neurogenesis in the recovery of function after CNS damage encouraged by the stimulation of endogenous stem cell production, exogenous stem cell implantation, and pharmacological means. There will also be two articles describing the work carried out to date on the use of Transcranial Magnetic Stimulation (TMS) and Transcranial Electrical Stimulation (TDCS) to increase the excitability of the brain in order to enhance the recovery of function after stroke.