

# PLASTIC CHANGES IN HEALTHY AND DAMAGED BRAIN

## Summary

During the last several years there has been an increased interest in the ability of the adult central nervous system to reorganize itself in response to injury and to environmental input. Although evidence for plastic changes in animals is considerable, until quite recently there have been few attempts to look for brain reorganization in human subjects and to demonstrate the behavioral consequences of those effects. Here is presented a review of the experiments showing that in humans the brain is also

capable of substantial reorganization throughout life in response to environmental changes. One of the findings is that cortex deprived of sensory input in one modality can be recruited by other modalities to process information in a functionally relevant manner. Because behaviorally manipulated use-dependent plasticity could be of value in solving clinical problems, new therapies for patients with various deficits have recently been developed on the base of the research data.