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Hippocampus arrays

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The hippocampus plays a role in the brain's ability to learn and remember. In the Early Edition of the Proceedings of the National Academy of Sciences, Mody *et al.* report the use of a microarray strategy to define genes involved in the development and function of the mouse hippocampus. They used Affymetrix oligonucleotide arrays to screen for the expression profiles of 11,000 genes in embryonic (E16) or postnatal (P1, P7, P16 and P30) mouse hippocampus tissue. They found that 1,926 genes showed dynamic changes in expression during hippocampus development. Self-organizing map (SOM) analysis defined 16 distinct gene clusters, reflecting different age-dependent expression patterns and changes in hippocampus function. For example, clusters of genes turned off at birth include a large number encoding for regulators of cell proliferation and the cell cycle. Postnatal clusters include genes involved in differentiation and synaptogenesis. These results form the basis of a neurogenomic database which will be invaluable for future studies of the development of the mammalian brain.

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