EDITORIAL

The Pharmacology of Memory

This special issue is aimed at providing an update to one of the fastest-moving areas of the Neurosciences—the neurobiology of memory processes. We have focused in this issue on cellular and biochemical mechanisms beginning with a general historical perspective provided by Georges Chapouthier. Ivan Izquierdo then contributes a comprehensive update of recent results of molecularly specific pharmacological studies. A new look at the role of dopaminergic and noradrenergic modulation in memory processing is proposed by Carolyn Harley. Yann Mineur and colleagues present a comprehensive overview of the genetic approach to unraveling the neurobiology of memory processes, including a consideration of recently developed techniques to determine which particular genes might be involved. Continuing the genetic approach, Martine Ammassari focuses on the contribution of inbred strains of rodents to our understanding of genetically linked cognitive styles and memory processes. Finally, Irene Guarino and colleagues describe a technique to use electrophysiological measurements combined with behavior to assess drug effects in freely moving rats. Together these papers give us a sampler of the latest developments in the field of the neurobiology of memory and should be of interest to a wide range of neuroscientists.

Susan Sara & Georges Chapouthier
Paris, November 2004