

Preface

It is abundantly clear that the endocannabinoid signalling system is ubiquitously expressed throughout the animal kingdom from simple invertebrates to man, and that it is represented in almost every cell type.

The components of the system in relation to the synthesis and metabolism of the endocannabinoids and their biological targets are beginning to be unravelled, but the degree of complexity involved is enormous. This is particularly true for endocannabinoid signalling in the central nervous system, which is the subject of this volume.

In the book, a variety of authors, who are all very active researchers in the field, provide current accounts of the roles of the endocannabinoid system in normal brain physiology in relation to the neurobiology of essential behaviors and in a number of central disease states.

The first part provides a background and “tool box”, detailing what is known about the endocannabinoids themselves and their target receptors and how they influence synaptic activity. It goes on to describe the genetic and pharmacological methods available for investigating the system.

The second part describes endocannabinoid roles in key systems controlling appetite, pain, memory and learning, stress responses and reproduction.

The final group of chapters reviews the current state of knowledge surrounding the function of the endocannabinoid system in depression, drug addiction, schizophrenia, feeding disorders and Tourette’s syndrome.

Given the enormous amount of information available and the rate of progress in research, it is impossible for the volume to be totally comprehensive, but we trust that it will provide an excellent background to researchers wanting to expand their area of interest and to newcomers to the field.

Nottingham, United Kingdom

*David Kendall
Stephen Alexander*

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