

# **An Introduction to the Blood–Brain Barrier**

# An Introduction to the Blood–Brain Barrier

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# Preface

The possibility of producing a short introduction to the physiology of the blood–brain barrier was both discussed and agreed by the authors after a small symposium on the subject had been held at the Serbian Academy of Arts and Science in 1989. The present volume is the result; in it we have tried to present lucidly the physical factors governing transport from blood into the central nervous tissue and the cerebrospinal fluid, and then to describe some studies on specific aspects, notably the transport of amino acids, sugars and peptides. Finally, in view of the suspicion that some neurological diseases have as their basis a failure or impairment of the blood–brain barrier, we have included an account of some attempts to establish animal preparations that might serve as experimental models mimicking human pathology. If the reading of this book stimulates research on the pathology of some central nervous diseases, it will have achieved its main purpose; in addition, we trust that workers in the life sciences will find it a useful introduction to a field that has expanded explosively since the early prejudices against the concept of a blood–brain barrier were dispelled. We must conclude by thanking the Wellcome Trust, the British Council and the Federal Yugoslav Zavod for their financial help in promoting the co-operation between workers in Britain and Yugoslavia that has culminated in the writing of this book.

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