Preface

The papers that comprise this Special Issue on Inhibition in the Brain were based on presentations made at a Satellite Symposium of the Society for Neuroscience Annual Meeting in Washington, D. C. on November 8, 1986. The purpose of this symposium was to discuss the role of inhibition in the brain. Whereas almost all of the incoming sensory and outgoing motor information of the brain is concerned with excitation, it is believed that much of the internal processing in the brain that controls neurological activity is shaped by inhibition. Furthermore, alterations in the inhibitory network of the brain are thought to underlie many neurological diseases, such as schizophrenia, Parkinson’s disease, Huntington’s disease, epilepsy, anxiety, depression, mania, sexual dysfunction and eating disorders. Recent research and technological advances have provided a large amount of new information and insights into the function and structure of inhibitory mechanisms in the central nervous system. Through this symposium, it was possible to bring together basic and clinical neuroscientists in a forum to present and discuss recent findings and concepts on the role of inhibition in the brain.

The organization of this Special Issue is based on the sequence of presentations at the Symposium. The first group of papers will detail the molecular biology and localization of the two major inhibitory neurotransmitters in the brain and spinal cord, gamma-aminobutyric acid (GABA) and glycine. The second group of papers will provide us with specific details on the functional role of GABA and glycine in different regions of the brain. The concluding section will detail the role of inhibitory neurons in several types of neurological and behavioral disorders.

As with any endeavor of this proportion, a number of people contributed significantly to bring this symposium to fruition. I would like to acknowledge the help that I have received from my co-organizers and associate editors, Drs. Eugene Roberts, Edward G. Jones and James H. Fallon and from Mr. Elliot M. Frohman. In addition, I am grateful to Teresa Frohman for her help with the technical business of the symposium and Barbara Korp for secretarial assistance. I want to also express my sincere gratitude to our four sponsors who are listed on the title page of this issue. These include Nelson Research and Development Company (now part of the Ethyl Corporation); Parke-Davis; Roche Laboratories; and the Medical Research and Education Society of the California College of Medicine at the University of California at Irvine. Last, but certainly not least, I gratefully acknowledge the help and support provided by the Editor of The Journal of Mind and Behavior, Dr. Ray Russ.

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