CONTENTS

MAGILL-SOLC, CATHERINE AND McMahan, U. J. Synthesis and transport of agrin-like molecules in motor neurons .............................................. 1

Trisler, David. Cell recognition and pattern formation in the developing nervous system ................................................................. 11

Mueller, Bernhard, Stahl, Bernd and Bonhoeffer, Friedrich. In vitro experiments on axonal guidance and growth-cone collapse .................. 29

Zhang, Ren-Ji, Zhu, Lexia, Wang, Dan-Bing, Zhang, Fan and Zou, Dong-Jing. Positional discrimination and re-development of synapses in the leech Whitmania pigra ....................................................... 47

Fraser, Scott E. and O'Rourke, Nancy A. In situ analysis of neuronal dynamics and positional cues in the patterning of nerve connections ............. 61

Frank, Eric and Mendelson, Bruce. Specification of synaptic connections mediating the simple stretch reflex ............................................ 71

So, S.-F., Campbell, G. and Lieberman, A. R. Development of the mammalian retinogeniculate pathway: target finding, transient synapses and binocular segregation ..................................................... 85

Atwood, H. L. and Govind, C. K. Activity-dependent and age-dependent recruitment and regulation of synapses in identified crustacean neurones ................................................................. 105

Feng, T. P. and Dai, Zheng-Shan. The neuromuscular junction revisited: Ca²⁺ channels and transmitter release in cholinergic neurones in Xenopus nerve and muscle cell culture ........................................... 129

Nicholls, J. G., Liu, Y., Payton, B. W. and Kuffler, D. P. The specificity of synapse formation by identified leech neurones in culture ............... 141

Jones, E. G. The role of afferent activity in the maintenance of primate neocortical function ............................................................... 155

Singer, W. The formation of cooperative cell assemblies in the visual cortex .... 177

Aguayo, Albert J., Bray, Garth M., Rasminsly, Michael, Zwimpfer, Thomas, Carter, David and Vidal-Sanz, Manuel. Synaptic connections made by axons regenerating in the central nervous system of adult mammals ................. 199

Sotelo, Constantino. Cerebellar synaptogenesis: what we can learn from mutant mice ................................................................. 225

Hamori, Jozsef. Morphological plasticity of postsynaptic neurones in reactive synaptogenesis ............................................................... 251

Kalil, Ronald E. The influence of action potentials on the development of the central visual pathway in mammals ........................................... 261

Raisman, G. and Field, P. M. Synapse formation in the adult brain after lesions and after transplantation of embryonic tissue ....................... 277

Kawamura, K., Murase, S. and Yuasa, S. Development of the rodent cerebellum and synaptic re-formation of donor climbing terminals on spines of the host Purkinje dendrites after chemical deafferentation .................................. 289