

**Model Systems in  
Biological Psychiatry**

Edited by  
David J. Ingle and  
Harvey M. Shein

The MIT Press  
Cambridge, Massachusetts,  
and London, England

# Contents

Dedication

ix

**1 Introduction**

1

David J. Ingle and  
Harvey M. Shein

**2 Animal Models of Schizophrenia**

4

Steven Matthysse and  
Suzanne Haber

**3 Animal Models and Schizophrenia**

26

Conan Kornetsky and  
Robert Markowitz

**4 Biological Models in the Study  
of False Neurochemical  
Synaptic Transmitters**

51

Ross J. Baldessarini and  
Josef E. Fischer

**5 Tissue- and Cell-Culture Models  
in the Study of Neurotransmitter  
and Synaptic Function**

80

Harvey M. Shein

**6 Central Dopaminergic Neurons:  
A Model for Predicting the  
Efficacy of Putative Antipsychotic  
Drugs?**

97

Benjamin S. Bunney and  
George K. Aghajanian

<b>7 The Frog's Visual System as a Model for the Study of Selective Attention</b>	David J. Ingle
113	
<b>8 Processes Controlling Aggressive Behavior in Cichlid Fish</b>	Walter Heiligenberg
132	
<b>9 A Model System for Neurophysiological Investigations of Behavioral Plasticity</b>	Dennis L. Glanzman, Timothy J. Teyler, and Richard F. Thompson
149	
<b>10 The Goldfish as a Model Experimental Animal for Studies of Biochemical Correlates of the Information-Storage Process</b>	Victor E. Shashoua
166	
<b>Index</b>	
191	