

Contents

Contributors	xiii
Foreword.....	xv
Preface.....	xvii
1. Basic Issues in the Use of Animals in Health Research.....	3
<i>J. Bruce Overmier and Marilyn E. Carroll</i>	
Part 1: Anxiety, Stress, Aggression, and Depression	15
2. Understanding, Treating, and Preventing Anxiety, Phobias, and Anxiety Disorders.....	19
<i>Richard E. Zinbarg and Susan Mineka</i>	
3. Eating, Emotion, and the Organization of Behavior.....	29
<i>Nancy K. Dess</i>	
4. Research on Animal Aggression: Emerging Successes for Understanding Determinants of Human Violence.....	41
<i>Klaus A. Miczek</i>	
5. Learned Helplessness and Depression.....	63
<i>Vincent M. LoLordo</i>	
Part II: Drug Abuse	79
6. Consequences of Early Exposure to Alcohol: How Animal Studies Reveal Later Patterns of Use and Abuse in Humans.....	85
<i>Norman E. Spear and Juan Carlos Molina</i>	
7. Behavioral Pharmacology of Commonly Abused Drugs: Concordance Between Laboratory Studies Conducted With Animals and Humans.....	101
<i>Craig R. Rush, Nancy A. Ator, Cathy A. Simpson, and Warren K. Bickel</i>	
8. Can Marijuana Use Lead to Marijuana Dependence?.....	115
<i>Alan J. Budney and Jenny Wiley</i>	
9. Nicotine Self-Administration in Animals and Humans....	127
<i>William A. Corrigall</i>	
10. Nondrug Incentives to Treat Drug Abuse: Laboratory and Clinical Developments.....	139
<i>Marilyn E. Carroll, Warren K. Bickel, and Stephen T. Higgins</i>	

11. Complementary Examination of Medications for Drug Abuse: Preclinical, Human Laboratory, and Clinical Research	155
<i>John Grabowski</i>	
Part III: Sleep, Illness, Injury, and Pain	177
12. When Sleep Is Not Good for You	181
<i>Adrian R. Morrison</i>	
13. Developmental Psychobiology of Hypertension: Contributions of Genetically Defined Animal Models	195
<i>Richard McCarty</i>	
14. Spinal Cord Injury: From Animal Research to Human Therapy	209
<i>James W. Grau and Robin L. Joynes</i>	
15. Clinical Implications of Animal Pain Research	227
<i>Mary W. Meagher</i>	
Part IV: Learning, Memory, and Cognition	245
16. Birds, Brains, and Visual Behavior: The Comparative Psychology of Perception	251
<i>Robert G. Cook and Jennifer Holtzinger</i>	
17. Pick the Flowers and Mind Your As and 2s! Categorization by Pigeons and Infants	263
<i>Edward A. Wasserman and Carolyn Rovee-Collier</i>	
18. Using Animal Models to Address the Memory Deficits of Wernicke–Korsakoff Syndrome	281
<i>Angela K. Hochhalter, Whitney A. Sweeney, Lisa M. Savage, Bruce L. Bakke, and J. Bruce Overmier</i>	
19. Drug Enhancement of Memory in Aged Rodents and Humans	293
<i>Paul E. Gold</i>	
20. Effects of Estrogen on Cognition: Implications for Menopause	305
<i>Donna L. Korol and Carol A. Manning</i>	
21. Insights About Learning in Alzheimer’s Disease From the Animal Model	323
<i>Diana S. Woodruff-Pak</i>	

Part V: Conclusion: Reflections on Laboratory Animal Research	337
22. A Scientist's Perspective on the Ethics of Using Animals in Behavioral Research.....	341
<i>Adrian R. Morrison</i>	
Appendix: Additional Reading.....	357
Author Index.....	363
Subject Index	377
About the Editors	385