

CONTENTS

Active Participants	ix
Abbreviations	xiii
Preface	xvi
I. Opening Lecture. Herman M. van Praag and W. M. A. Verhoeven	
Neuropeptides. A new dimension in biological psychiatry	3
II. Schizophrenia. (Chairmen: Seymour Kety and Earl Usdin)	
1. Dopaminergic neurons of spinal cord: a possible site for the action of neuroleptic drugs. Norton H. Neff, S. Gentleman, M. Parenti, and J. W. Commissiong	37
2. Clinical studies with naloxone and β -endorphin in chronic schizophrenia. Philip A. Berger, Stanley J. Watson, Huda Akil, Jack D. Barchas, and Choh Hao Li	45
3. The use of blood platelet serotonin uptake as a model in the study of mental illness. Avner Rotman	65
4. Human platelet aggregation response to serotonin as an index of efficacy of chlorpromazine. A. Hefez, B. Oppenheim, and M. B. H. Youdim	77
5. Trace amines in schizophrenia. Merton Sandler	95
6. Adaptive behavior and endorphin biotransformation. Peter Burbach and David De Wied	103
7. Inosine triphosphate metabolic error in brain. Possible link to mental disease. Bernardo S. Vanderheiden	115
8. Role of serine, glycine, and the tetrahydrofolic acid cycle in schizoaffective psychosis. A hypothesis relating porphyrin biosynthesis and transmethylaton. J. Bruinvels, L. Pepplinkhuizen, H. R. van Tuijl, P. Moleman, and W. Blom	139
9. Lithium and brain function: a new hypothesis. Claude F. Baxter, Ken H. Tachiki, Steven M. Blaser, Roger A. Baldwin, and Lawrence F. Gosenfeld	155
III. Affective Disorders. (Chairmen: Herman van Praag and Moussa B. H. Youdim)	
1. Serum dopamine- β -hydroxylase: indicator of what? Jon M. Stolk, Jeffrey H. Hurst, Matthew J. Friedman, Peter Q. Harris, Dee A. Van Riper, and Bruce C. Nisula	171

2. Monoamine oxidase inhibition without the 'cheese effect': clinical and pharmacological relevance in the treatment of depression. Moussa B. H. Youdim and Julien Mendlewicz ...	193
3. Pharmacology of selective propargyl 'suicide' inhibitors of monoamine oxidase. John P. M. Finberg, A. Sabbagh, and Moussa B. H. Youdim	205
4. Blood versus urinary MHPG as an indicator of brain NE metabolism in man. Harvey C. Stancer, Jerry J. Warsh, Siu W. Tang, S. Takahashi, and R. J. Shephard	221
5. Amine metabolism in depressive illness and its relationship to the response to antidepressant drugs. A. Pauline Ridges	229
6. Indoleamine synthesis and function: studies on indoles in CSF and on the therapeutic action of tryptophan in affective disorders. Simon N. Young	247
7. A new concept: brain area specific imbalance of neurotransmitters in depression syndrome—human brain studies. Peter Riederer and Walter Birkmayer	261
8. Genetics of plasma dopamine- β -hydroxylase (DBH), erythrocyte catechol-O-methyltransferase (COMT), and platelet monoamine oxidase (MAO) in pedigrees of patients with affective disorders. Elliot S. Gershon, Lynn R. Goldin, C. Raymond Lake, Dennis L. Murphy, and Juliet J. Guroff	281
IV. Neurological and Other Disorders. (Chairmen: Theodore L. Sourkes and Kenneth G. Lloyd)	
1. Estrogens and the extrapyramidal system. Catherine Euvrard, Claude Oberlander, and Jacques R. Boissier	303
2. Catecholaminergic innervation of the human cerebral cortex in presenile and senile dementia. Histochemical and biochemical studies. Brigitte Berger, J. P. Tassin, G. Rancurel, and G. Blanc	317
3. Indications for GABA neuron dysfunction in mental disease. Kenneth G. Lloyd	329
4. The use of selective monoamine oxidase type B inhibitors in the treatment of Parkinson's disease. Moussa B. H. Youdim ..	345
V. Behavior: Animal Models. (Chairmen: Marta Weinstock and Gerald Curzon)	
1. Animal models of the hyperkinetic child syndrome. Barry D. Berger and Robert L. Sprague	359
2. Maternal deprivation: an animal model of psychosocial dwarfism. Saul M. Schanberg and Cynthia M. Kuhn	373
3. The effect of chronic lithium on adenylate cyclase and dopamine-mediated animal behaviors. R. P. Ebstein, S. Eliashar, and R. H. Belmaker	395

4. Behavior provoked by simultaneous release of dopamine and serotonin: possible relevance to psychotic behavior. Gerald Curzon, J. C. R. Fernando, and A. J. Lees	411
5. Behavioral effects of β -adrenoceptor antagonists associated with blockade of central serotonergic systems. Marta Weinstock	431
6. The structural requirements of phenylethylamines in eliciting the serotonin syndrome. Ruth Ashkenazi	445
7. The behavioral and biochemical consequences of repeated electroconvulsive shock administration to rats and the possible clinical relevance of these changes. A. Richard Green ...	455
8. The hippocampus: a model system for studying the action of norepinephrine in the brain. Menahem Segal	469
9. Neurochemical correlates of amphetamine-induced recovery from amnesia. N. Eric Naftchi, Margaret Demeny, David Quartermain, and Harvey Altman.	485
10. Purification, characterization, and quantitation of rat pheochromocytoma tyrosine hydroxylase and of dopamine β -hydroxylase. Keith A. Markey, J. C. Fong, L. Shenkman, V. J. Burroughs, R. Ebstein, and Menek Goldstein	499
11. Apomorphine induces behavioral regression: a sequence that is the opposite of neurological recovery. Henry Szechtman, Kurt Ornstein, Rafi Hofstein, Philip Teitelbaum, and Ilan Golani	511
VI. Receptors; Enzymes. (Chairmen: Norman Weiner and Tim J. Crow)	
1. Neural components of a stress response: central pathways mediating the induction of adrenal tyrosine hydroxylase. Theodore L. Sourkes and Jean-Pierre Gagner	521
2. The role of central pre- and postsynaptic receptors in the mechanism of action of antidepressant drugs and the significance of high-affinity [3 H]imipramine binding. Salomon Z. Langer, M. S. Briley, and R. Raisman	531
3. Regulation of tyrosine hydroxylase in dopaminergic neurons of the striatum. Norman Weiner, Ellen Barnes, and Joseph M. Masserano	545
4. The dopamine receptor as the site of the primary disturbance in schizophrenia. Tim J. Crow, F. Owen, A. J. Cross, E. C. Johnstone, M. H. Joseph, and A. Longden	559
5. GABA and benzodiazepine receptors in rat and human brain: autoradiographic localization by a novel technique. Jose M. Palacios, W. Scott Young, III, and Michael J. Kuhar	573
6. Experimental immune lesions of peripheral and central	

noradrenergic nerves produced by antibodies to dopamine β -hydroxylase. Laurie B. Geffen and R. A. Rush	585
7. Regulation of pineal N-acetyltransferase activity: focus on 'turn-off'. David C. Klein, Joan L. Weller, D. Auerbach, and M. A. A. Namboodiri	603
VII. Summary. Norman Weiner	629
Alphabetical list of contributors	639
Index	641