

hormonal substances and the serotonergic systems.

Tryptophan-5-hydroxylase, the enzyme catalyzing the rate-limiting reaction in the synthesis of 5-hydroxyindoles, has resisted adequate purification. This fact has led to much controversy over the regulation of this enzyme *in vivo*. Gal presents the various problems; the mechanisms are not clear, but various drugs, such as reserpine, MAO inhibitors and LSD, alter its activity, and the pituitary-adrenal system may also be involved.

Another of the metabolic pathways of serotonin that has attracted considerable attention, especially in the area of biological psychiatry, has been the N-methylation of indolealkylamines by an N-methyltransferase enzyme found in brain. The significance of such a reaction, if it were to occur *in vivo*, is the formation of potential psychotomimetic amines, such as bufotenin. This immediately raises the question of such reactions in the genesis of the psychotic states in schizophrenia.

Some of the most exciting works on serotonin concern its role in various physiologic and psychological processes. The current evidence supports and extends the original findings of Jouvet *et al.* regarding serotonin neurons regulating sleep mechanisms. It is also clear that other monoamines may be involved in the phenomenon of sleep. A similar relationship is seen in the possible role of serotonin in sexual behavior. While earlier work demonstrated clearly the involvement of monoamine systems in

sexual behavior of the male rat, Meyerson *et al.* describe experiments which indicate that the sexual responsiveness of female rats also is regulated by serotonin and the catecholamines. In both male and female animals it appears that not only the monoamines, but also the sex hormones, are essential in the regulation of sexual behavior.

The remainder of the second volume addresses itself to the possible involvement of serotonin in a variety of other psychobiological mechanisms, such as aggression, memory, and the various forms of human psychiatric disorders. The amine mechanisms in these functions are still equivocal.

Two messages emerge from these volumes. First, that serotonin neurons are involved in the regulation of a multitude of psychobiological and neuropsychopharmacologic phenomena, and second, that serotonin is rarely, if ever, a single regulator chemical by itself, *i.e.*, there usually is an intricate balance between serotonin and other neurochemicals, such as the catecholamines, GABA, and acetylcholine.

"Serotonin: New Vistas" is one of the best sources for the latest information on the indoleamines. Unfortunately, the "latest" is never new enough in this rapidly changing field.

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Books Received

Title and Edition	Author/Editor	Publisher Address, Name, Year	Pages	Price
Parenteral Nutrition in Infancy and Childhood	Hans Henning Bode Joseph B. Warshaw	Plenum Press New York, New York 1974	307	\$22.50
Review of Medical Pharma- cology. Fourth edition	Frederick H. Myers E. Gawetz A. Goldfien	Lange Medical Pub- lications California 1974	721	\$10.50
Acupuncture for Physicians	Teruo Matsumoto	Charles C Thomas Springfield, Illinois 1974	204	\$14.75
Evaluations of Drug Inter- actions. 1973, first edition. 1974, supplement.		American Pharmaco- logic Association Washington, D.C. 1973	357 359-424	\$10.00 \$2.00
Fourth Symposium on Oral Sensation and Perception. Development in the Fetus and Infant	James F. Bosma	U.S. Dept. HEW Pub. No. (NIH) 73-546 Bethesda, Maryland 1973	429	\$8.55

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Title and Edition	Author/Editor	Publisher Address, Name, Year	Pages	Price
Drug Interactions	P. L. Morselli S. Garattini S. N. Cohen	Raven Press New York, New York 1974	406	\$28.00
Biogenesis Evolution Homeostasis	A. Locker	Springer-Verlag New York, New York 1973	190	\$13.40
General Ophthalmology	Daniel Vaughan Taylor Asbury	Lange Medical Publications California 1974	334	\$9.50
Manpower Issues and Voluntary Regulation	Herbert J. Lerner	Neale Watson Aca- demic Publica- tions, Inc. New York, New York 1974	200	\$5.95
The Physiological Basis of Starling's Law of the Heart	Ciba 24 (Foundation Symposium)	American Elsevier Publishing Co. New York, New York 1974	298	\$15.40
Antimorphiniques et Anes- thesie Analgésique Sequentielle	J. De Castro P. Parmentier	Editions Academia S.A. Brussels, Belgium 1975	138	\$18.70
Brain Dysfunction in Meta- bolic Disorders (Association for Research in Nervous and Mental Disease, volume 53)	Fred Plum	Raven Press New York, New York 1974	324	\$21.50
Handbook of Obstetrics and Gynecology. Fifth edition.	Ralph C. Benson	Lange Medical Pub- lications California 1974	770	\$8.00
Respiratory Physiology. Physiology Series One, volume 2	A. C. Guyton J. G. Widdicombe	University Park Press Baltimore, Md. 1974	381	\$19.50
Illustrated Diagnosis of Localized Diseases	R. Douglas Collins	J. B. Lippencott Philadelphia, Pa. 1974	216	\$34.00
Modern Hospital Hypnosis	David L. Scott	Year Book Medical Publishers Chicago, Ill. 1974	203	\$15.95
Sémiologie Chirurgicale	Lucien Leger	Masson et Cie Paris, France 1974	480	100 F francs
Biotransformation of General Anesthetics	G. Dal Santo	Little, Brown and Co. Boston, Mass. 1974	182	
Effects of Hemorrhage on Anesthetic Requirements	W. H. Massion	Little, Brown and Co. Boston, Mass.	247	
Scientific Foundations of Anesthesia. Second edition.	Cyril Scurr Stanley Feldman	Year Book Medical Publishers Chicago, Ill. 1974	590	
Narcotics and the Hypothalamus	Emery Zimmerman Robert George	Raven Press New York, New York 1974	272	\$18.95