

reviewed behaviorally conditioned suppression of the immune system and provided strong support for the integration of the "somatic" and "psychological" aspects of immunity.

The table of contents of the third edition of *Psychoneuroimmunology* is an indication of the depth and breadth of its subject matter. Molecular biology, genetics, the neurosciences, immunology, cell biology, endocrinology, chronobiology, pharmacology, anatomy, biochemistry, and the behavioral sciences are considered. This list demonstrates that psychoneuroimmunology constitutes a meeting ground for medicine, biochemistry, genetics, psychology, and human ethology. It emphasizes the indivisibility of somatic and psychological processes and the inseparability of immunologic and neuroendocrine processes.

The first three parts of *Psychoneuroimmunology* deal with the pathways that bridge the brain and the immune system — namely, the neuroendocrine and autonomic nervous systems. The primary and secondary lymphoid organs are sympathetically and parasympathetically innervated, and these types of nerve fibers form neuroeffector junctions with the lymphocytes, monocytes, macrophages, and granulocytes that possess the appropriate receptors. Several chapters in the book cover the ways in which neural and neuroendocrine signals modify immune processes and the ways in which cytokines affect brain function. One of the most valuable chapters deals with how sleep influences the homeostatic regulation of the immune system. Sleep deprivation, for example, adversely affects resistance to infectious diseases. Most of the mechanisms underlying the relation between sleep and modulation of the immune system are unknown, but it seems clear that these mechanisms are important in host defenses.

Parts IV and V of *Psychoneuroimmunology* document the effects of behavior and stress on immune function. Important topics, such as pain and the effects of early rearing experiences and social interactions, are covered. *Psychoneuroimmunology* ends with chapters, in part VI, devoted to the links between psychoneuroimmunology and neurologic and psychiatric diseases, infection, surgical trauma, cardiovascular disease, periodontal disease, alcoholism, and aging. These contributions discuss the influence of emotions on immune responsiveness and the ways in which personal and social support can help in the recovery from an immune-mediated disease.

Reading this book leaves the impression that research in psychoneuroimmunology is growing exponentially. The third edition of *Psychoneuroimmunology* contributes substantially to this effort.

DANIEL P. CARDINALI, M.D., PH.D.  
University of Buenos Aires Faculty of Medicine  
1121 Buenos Aires, Argentina

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## BOOKS RECEIVED

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### PEDIATRICS

- Child Neurology.** Sixth edition. Edited by John H. Menkes and Harvey B. Sarnat. 1280 pp., illustrated. Philadelphia, Lippincott Williams & Wilkins, 2000. \$115. ISBN 0-7817-2385-X.
- Children's Health Care.** (Vol. 29. No. 2.) Mahwah, N.J., Lawrence Erlbaum, 2000. \$40 (per volume). ISSN 0273-9615.
- Crying as a Sign, a Symptom, and a Signal: Clinical, Emotional and Developmental Aspects of Infant and Toddler Crying.** (Clinics in Developmental Medicine. No. 152.) Edited by Ronald G. Barr, Brian Hopkins, and James A. Green. 228 pp., illustrated. London, Mac Keith Press, 2000. (Distributed by Cambridge University Press, New York.) \$74.95. ISBN 1-898-68321-2.
- Handbook of Early Childhood Intervention.** Second edition. Edited by Jack P. Shonkoff and Samuel J. Meisels. 734 pp., illustrated. New York, Cambridge University Press, 2000. \$32.95 (paper); \$74.95 (cloth). ISBN 0-521-58573-2 (paper); 0-521-58471-X (cloth).
- Review for Textbook of Pediatric Emergency Medicine.** Fourth edition. Edited by Sujit Sharma and Vincent J. Wang. 458 pp. Philadelphia, Lippincott Williams & Wilkins, 2000. \$49.95. ISBN 0-7817-2467-8.
- Skeletal Injury in the Child.** Third edition. Edited by John A. Ogden. 1198 pp., illustrated. New York, Springer-Verlag, 2000. \$295. ISBN 0-387-98510-7.
- Treatment of Child Abuse: Common Ground for Mental Health, Medical, and Legal Practitioners.** Edited by Robert M. Reece. 378 pp. Baltimore, Johns Hopkins University Press, 2000. \$65. ISBN 0-8018-6320-1.

### PHARMACOLOGY AND SUBSTANCE ABUSE

- The Antimicrobial Drugs.** Second edition. By Eric M. Scholar and William B. Pratt. 607 pp., illustrated. New York, Oxford University Press, 2000. \$98.50. ISBN 0-19-512529-0.
- Cholinesterases and Cholinesterase Inhibitors.** Edited by Ezio Giacobini. 270 pp., illustrated. London, Martin Dunitz, 2000. \$125. ISBN 1-85317-910-8.
- A Guide to Clinical Drug Research.** Second edition. Edited by Adam Cohen and John Posner. 206 pp. Boston, Kluwer Academic, 2000. \$115. ISBN 0-7923-6171-1.
- Handbook of Alcoholism.** Edited by Gerald Zernig, Alois Saria, Martin Kurz, and Stephanie S. O'Malley. 492 pp., illustrated. Boca Raton, Fla., CRC Press, 2000. \$99.95. ISBN 0-8493-7801-X.

## CORRECTIONS

Androgen-Insensitivity Syndrome as a Possible Coactivator Disease (September 21, 2000;343:856-62). On page 860, in Figure 2, the labels under the x axis in Panels A and B should be deleted, since 5 $\alpha$ -dihydrotestosterone and dexamethasone were not added in these experiments. We regret the error.

Hyperparathyroid and Hypoparathyroid Disorders (December 21, 2000; 343:1863-75). On page 1871, the sentence that begins 12 lines from the bottom of the left-hand column should have read, "Both syndromes are associated with rearrangements and microdeletions affecting an unknown gene or genes on the *long* arm of chromosome 22," not "on the *short* arm of chromosome 22," as printed.

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