Book Review

Nunn's Applied Respiratory Physiology, 4th Edition

J.F. Nunn. Boston: Butterworth, Heinemann Ltd., Publishers, 1993. 658 pages. ISBN: 0-7506-1336X

For 25 years, a respected source of detailed information about respiration with respect to anaesthesia has been *Applied Respiratory Physiology* by J.F. Nunn. The latest edition, the fourth, was published last year.

This most recent edition, like the one that immediately preceded it, is organized into two broad sections. The first, "The Basic Principles," reviews the anatomy and physiology of the respiratory system. The second section, "The Applications," considers 20 individual respiratory disorders or conditions which relate to anaesthesia, the perioperative period and/or intensive care (e.g., atelectasis, pulmonary embolism, ARDS, drowning, ventilatory failure, extracorporeal gas exchange). Many sections of this edition have been revised to include recent advances in information. A few new chapters or sections have been added (e.g., anaemia, pregnancy and the transplanted lung). As in previous editions, cross-referencing is extensive.

The major strengths of this book continue to be the author's expert distillation of vast amounts of literature (e.g., the chapter on control of ventilation); his masterful integration of basic and applied information (e.g., section on oxygen transport from the lung to the cell); and his lucid presentation of difficult concepts (e.g., the principles of assessing distribution of ventilation). If there are weaknesses, they may be the failure to consider one or two highly pertinent clinical problems (e.g., pulmonary aspiration of gastric contents) and the occasional jump to a conclusion without obvious justification (e.g., the statement that some cases of SIDS very likely resemble the classic obstructive sleep apnoea syndrome). The author's straightforward writing style together with his carefully conceived diagrams and figures make the text easy to read and comprehend.

Nunn's *Applied Respiratory Physiology* will continue to be widely recognized as a standard textbook and reference on respiration as it pertains to anaesthesia. All anaesthetists and trainees should have ready access to the most recent edition.

Richard L. Knill MD FRCPC
London, Ontario