Book Review

Techniques in Extracorporeal Circulation

Techniques in Extracorporeal Circulation
Third Edition
Edited by Philip H. Kay
Butterworth-Heinemann Ltd.
80 Montvale Ave.
Stoneham, MA 02180

Price $195.00
336 pages, 23 chapters, 39 contributing authors

As perfusionists and teachers of perfusion (officially and unofficially) we are always keeping our eyes open for a good comprehensive perfusion reference book. If this is your goal, then I suggest the third edition of Techniques in Extracorporeal Circulation as a book to fulfill that need.

This book covers a broad range of extracorporeal techniques in a thorough manner. Chapters read smoothly and are suitably referenced. Techniques in Extracorporeal Circulation begins with a short chapter called “Historical Aspects” and ends appropriately with a chapter on “Future Developments and Potential Applications of Extracorporeal Circulation in Medicine and Surgery.” As in previous editions of this book, contributors come from the USA, UK and Italy, giving a delightful international perspective that I enjoyed.

I will not bore you by individually reviewing each of the 23 chapters. However, I feel that certain chapters are especially well written and contain information that, as a perfusionist, I found particularly useful. Those chapters deserving mention are “Physiology and Pathophysiology of Extracorporeal Circulation,” “Membrane and Bubbler Oxygenators,” “Filtration in Cardiopulmonary Bypass,” “Intraoperative Myocardial Protection,” “The Role of the Complement System during Cardiopulmonary Bypass,” “Ventricular Assist Devices” and “Artificial Hearts Present and Future.”

There were a few chapters that I found to be relatively superficial to all but the basic beginner; they are “Design and Principles of the Extracorporeal Bypass,” “Priming Fluid for Cardiopulmonary Bypass” and “Blood Conservation following Cardiovascular Surgery.”

The third edition of Techniques in Extracorporeal Circulation is a must-have reference book for a perfusionist training program and a recommended reference for the thoracic surgeon, resident or practicing perfusionist. Although I would not require students in our program to purchase this book due to its expensive price tag, I would recommend it as a high priority purchase when they land that first job.

— Robin Sutton, CCP
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