From the Editor

On Blinding and Vision

Should the Journal’s reviewers be blinded with regards to the authors and institutions that submit papers to be considered for publication? In April of this year, Ross and colleagues’ study on bias related to the acceptance of abstracts for presentation at scientific meetings was published in JAMA (1). The study showed that providing reviewers with the submitting authors’ and institutions’ identities introduced bias, favoring work of prominent authors from the United States, from English-speaking countries outside the United States, and from prestigious academic institutions. This study suggests that program committees should be blinded with regards to the authors and the institutions submitting abstracts for presentation at national conferences. The AmSECT International Conference Program Committee has a policy of blinding the selection committee from the authors and institutions that submit abstracts for presentation at the International Conference each year. In May, the Journal’s editorial board decided to take this a step further by likewise blinding reviewers from the authors of manuscripts submitted for publication in the Journal of ExtraCorporeal Technology. The aim of our editorial review process is to maintain a level of quality with regards to what is published in the Journal, to make articles more readable, and to improve the quality of reporting. This change will improve our outstanding editorial board’s ability to assess and improve the quality of manuscript submissions without bias related to “from whom” and “from where” work originates. This will help to assure that reviews and publication decisions are based on the merit of the submission and not the reputation of institutions or submitting authors. Yankauer examined the effectiveness of blind reviewing and found that, while a reviewer claimed to be able to identify an author and institution 47% of the time, he was correct only 39% of the time. He further reported that self-referencing provided the clue to author identification in 62% of the cases and personal knowledge of the authors’ work in 38% of the cases. While blinding will prove to be time consuming for our managing editor and not always effectual, the editorial board favor the policy. It is the right thing to do for submitting authors.

Speaking of blind, the original article by Ahmed and colleagues from Hammersmith Hospital in London published in this issue is a reminder of how precursors to injury related to certain percutaneous injuries are often invisible to the operating room team (see pages 116–121). This work examines the prevalence of fat emboli introduced into the circulation from cardiomyotomy suction during cardiopulmonary bypass. The invited commentary of David Stump from Wake Forest University, who has done pioneering research on this topic, accompanies this important work (see page 122). Jeff Riley’s “Classic” in this issue is an original article authored by Solis and colleagues in 1976 (see pages 188–193). The authors concluded, “The implication is that a cardiomyotomy reservoir with improved filtration characteristics needs to be developed.” Similarly, Ahmed and colleagues concluded, “What is clear from this study is that the fat emboli continue to be a challenge in clinical practice where revascularization is supported by CPB.” Deja vous? Riley rightly calls for a systematic review and further focused studies to address this and related important questions.

It has been said; “Vision is compounding a deep dissatisfaction of what is and a clear grasp of what could be. It is understanding which leads to indignation over the status quo and a growing into an earnest quest for an alternative (2).” For more than five decades, cardiopulmonary bypass (CPB) has provided a portal to one of medicines greatest advances, open heart surgery. More than one million patients undergo surgery with CPB each year. From the very beginning, the risks of CPB were well recognized. As early as 1962, Sid Gilman described the problems of gaseous emboli, particulate emboli and their association with brain injury; some of which he referred to as gnostic injuries (3). Today the mechanisms of these injuries are better described, and devices and techniques have improved substantially; however, we have yet to fully eradicate the precursors to injury related to certain perfusion and surgical practices. Historically, decisions related to CPB techniques and devices have been based on a number of factors, including scientific evidence, cost, ease of use, tradition, perceived benefit, and experience (4). Currently, there is wide variation in practice across centers and, in many cases, variation within centers by surgeons and their teams. In the past decade there has been a movement to redesign clinical practice based principally on scientific evidence (5,6). Structured reviews of
the literature that involve examining and classifying the scientific evidence are needed to provide a foundation for practice decisions in medicine. Recently, Shan and colleagues have authored several guidelines for CPB based on an evaluation of the published literature (6). In this issue of the Journal, Likosky’s editorial describes a strategy to evaluate published literature (see pages 112–115). He provides a framework for examining and classifying the literature, the first steps of a pathway to evidence based practice.

Al Stammers, the former editor of this Journal, now President of The American Society of Extracorporeal Technology, is leading an effort called the International Consortium on Evidence Based Perfusion Practice. Thirty-one perfusion societies from around the world have been invited to participate in this effort and it is likely that most will participate.

The Consortium’s mission is, “To continuously improve the delivery of care and outcomes for surgical patients through: developing evidence based guidelines for extracorporeal circulation, promoting the integration of these guidelines into clinical practice, encouraging research in areas where evidence is scarce and evaluating improvement in surgical care related to the adoption of the guidelines.” The work of this group will be to close the gap between the current level of cardiovascular care and the best possible care, a movement from “what is” to “what should be.” The group will be hosting a Best Practices in Perfusion 2006 conference at the Hilton Bellevue Hotel in Bellevue, WA from October 5–7, 2006. See the announcement on the preceding page.

We are also pleased to publish a Review from Najmai, from The University of Arizona, Tucson, about glycemic control during CPB (see page 168–173). The authors provide a clear explanation of the changes in glucose metabolism during CPB. Tight glycemic control during CPB is an example of an aspect of care that one would classify as Class I Level B according to the American Heart Association/American College of Cardiology Guidelines (see Likosky, pp. 112–115). Blood glucose levels should be carefully managed in cardiac surgery patients.

Also included in this issue, from Evarts and colleagues, is a review of the science behind platelet rich plasma and platelet gel (see pages 174–187).

It is hoped that this issue of the Journal will fuel a growing indignation with the status quo and a clearer vision of what could be.

Robert Groom, MS, CCP
Editor-in-Chief

REFERENCES