

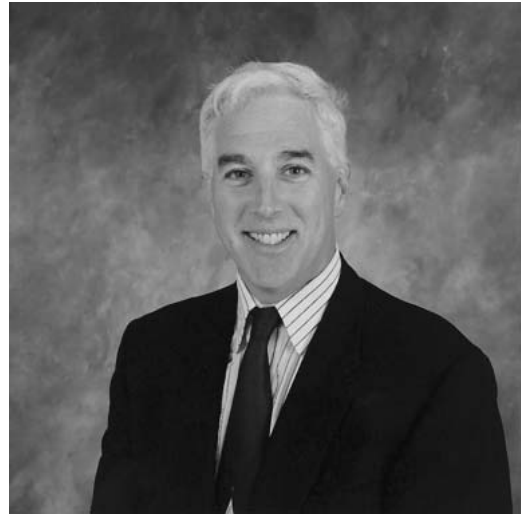
From The Editor

Going with the Flow

Every perfusionist learns in his or her primary extracorporeal education the aged old adage that “Low flow is better than no flow, and no flow is better than pumping air”. Although identifying the source of such a colloquialism is all but impossible, I will take editorial liberty and attribute it to my friend and mentor, the late Jeanne Lange, who was never without quick and insightful wit. Since ‘flow’ during cardiopulmonary bypass is so intimately a part of a perfusionist’s modus operandi, we become obsessive with its maintenance, and go to great lengths to assure that it is achieved to some calculated level. Of course I mean no disrespect to my colleagues who would be quick to correct my over simplification of the critical relationship of vascular integrity, nutrient delivery, and waste removal, as the icons of successive perfusion. Again, I make myself vulnerable to purists who would scoff at the following, but, all in all, given the choice of ischemia versus hypoperfusion one would defer to the latter as the preferable option.

In this issue of the *Journal* two groups of clinicians from two continents describe techniques for providing flow in surgical situations that have traditionally seen deep hypothermia and circulatory arrest as the method for facilitating surgical repair. Although there are various words that illicit chill to all but the most stoic of clinicians, the one that sends the starkest of shivers has to be *arrest*; with circulatory arrest accentuating the fear factor several fold. Both papers (Auer et al. and Kilpack et al.) describe how regional perfusion can be achieved in operations for congenital heart disease of the aorta. Alternative cannulation locations permit continuous flow even during ascending and arch repair. Although this technique has been described elsewhere, the growing interest in such a modality warrants continued reporting with an emphasis on replication. Both sets of authors are to be congratulated for their outcomes and identification of children who will benefit from such a practice.

Over the past 25 years all three major American perfusion safety surveys (Stoney, Kurusz, Mejak) identified co-



agulopathy as one, if not the, primary incidents of extracorporeal flow. Such a challenge is not lost in perfusion research as evidenced by the numerous papers that address the complexity of the problem. Of interest is the juxtaposition of research on hemostatic assessment (Newsome et al., Shaffer et al., Ostrowski et al.), with blood conservation methods (Dickinson et al., Roeder et al.) and finally methods of treating the hemostatically challenged (Englert and Jiang, Jabr et al., Mejak, et al.). And finally, the interwoven nature of inflammation and coagulation are brought to light by the paper by Garner and associates who evaluate the effects of leukocyte reduction on metalloproteinase release during bypass.

Bill Horgan says it best in his editorial on perfusion education when he states that the “willingness to change has made perfusion ... the gold standard”. It is only through education, and the continued quest for knowledge that the inherent risk associated with our practice becomes nothing more than a footnote to the benefit of our actions. For this perfusionists should take pride, and simultaneously, stay motivated for the future.

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Editor