Classic Pages of the *Journal of ExtraCorporeal Technology*

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A Hemodilution Cardioplegia and a Proposed Delivery System

*Dyson CW, Emerson RC, Buckberg GD. A hemodilution cardioplegia and a proposed delivery system. J Extra Corpor Technol. 1980;12(4);86–89. [UCLA Medical Center, Los Angeles, California]*

**BLOOD CARDIOPLEGIA**

President Stammers presented AmSECT’s Gibbon Award to Gerald Buckberg in Orlando, Florida, on April 12, 2008. Listening to Dr. Buckberg’s award acceptance address to AmSECT attendees prompted the JECT Editor to ask me to point to two classic articles by Dr. Buckberg and his perfusionist lead author Charles Dyson (1,2).

Searching the keyword “cardioplegia” in the JECT database reveals 44 articles. The first article listed chronologically in the search is this JECT issue’s classic article authored by Dyson, Emerson and Buckberg (2). Chuck Dyson presented the manuscript at the 1978 AmSECT Conference and their second paper (2) subsequently in 1980 at the International Conference in Philadelphia.

In their classic articles, Dyson and coworkers share the vision of a single-pump blood cardioplegia system—the single pump system used by many of us today. The one-pump system was creative in its simplicity and yielded a 1:1 blood to crystalloid ratio with two equal ID tubing segments loaded in the pump. You will recognize the list of crystalloid cardioplegic solution dilutent components that have not changed substantially in more than 27 years. Buckberg and his research team even recommended a low level of calcium in the crystalloid component, presumably to help avoid stone heart syndrome (3).

Our classic article references four articles for which Dr. Buckberg is the common author. In reading Dr. Buckberg’s CV (4) it is easy to understand why he was selected for this year’s Gibbon Award Recipient. Many millions of patients have benefited from the blood cardioplegia technique that Dr. Buckberg developed in his laboratory at UCLA and subsequently lead its translation into clinical practice. Dr. Buckberg graciously acknowledged the contribution of perfusionists with whom he has been associated with over the years as clinicians and research collaborators. This JECT classic is a perfect example of Dr. Buckberg’s professional collaboration and communication with perfusionists that earned him our highest professional award in honor of Dr. John H. Gibbon (5).

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**REFERENCES**