

## **MEMORIALS FOR EDITORIAL BOARD MEMBERS: DeBakey, Kolff and Winslow.**

This is written in memory of the life-long achievements of three of our senior editorial board members – in alphabetical orders:

**Michael Ellis DeBakey, M.D.** (1908 –2008) invented the roller pump while a medical student at Tulane University. There was no initial interest but was later used in heart-lung machine making it possible for open heart surgery. Among his many other innovations, he was best known for his work on Darcon vascular graft. It is so successful for the replacement of ruptured aortic aneurysm that it is known as the DeBakey Procedure. His fame in cardiovascular surgery was such that he was consultant and surgeon to head of states around the world. Most amazing was his ability to continue with medical practice all the way to 2008. He received numerous awards and recognitions including the Albert Lasker Award and the Congressional Gold Medal.

**Willem Kolff, M.D.** (1911-2009) was known as the Father of Artificial Organs. While in medical school he invented an intermittently inflatable cuff around the leg to help patients with poor circulation. After medical school and while a resident he started research on dialysis. He developed the first working artificial kidney during World War II in an occupied Dutch town, Groningen. All he had for the dialysis membrane was sausage castings he obtained from a nearby shop. After the war he moved to Cleveland Clinic in the U.S.,. There was initially much opposition to the clinical use of his artificial kidneys. However, its clinical effectiveness was such that this soon became a routine treatment for terminal renal failure. Thousands and thousands of patients around the world owe their lives to his invention. He continued with research on artificial hearts and artificial eyes. In 1967 he moved to the University of Utah where his research with his collaborators led to the clinical use of artificial hearts and the artificial eyes. He continued to carry out research as Professor and Director of the Kolff Laboratory there until 1997. He received numerous honours including the Albert Lasker Award.

**Dr. Robert Winslow, M.D.** (1941-2009) obtained his medical training from the Johns Hopkins University School of Medicine. He carried out research at M.I.T., the National Institutes of Health and the Centers for Disease Control and Prevention. He was initially best known for his research on the effect of high altitude on oxygen transport in red blood cell hemoglobin. This background was vital for his later research and developmental efforts in hemoglobin based blood substitutes when he became colonel and chief of blood research at Letterman Army Institutes He then joined the University of California San Diego where he started a blood substitute company, Sangart Inc, to develop an oxygen therapeutic based on polyethylene glyco-hemoglobin.. His research has contributed importantly to the basic knowledge of hemoglobin-based blood substitutes. His most recent large multi-author book on blood substitutes is one of the most important reference sources in this area.

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