CARDIAC SURGERY
in UTAH

Donald B. Doty, M.D.
Salt Lake City, Utah
KENT W. JONES, MD

Illustration by Marilou Kundmueller
UNIVERSITY OF MINNESOTA

Clarence Dennis, MD PhD

Used heart lung machine with bubble oxygenator on human unsuccessfully

1951
Richard A. DeWall MD

Invented an oxygenator that introduced bubbles of oxygen into a helical coil of polyvinyl tubing where oxygen attached to hemoglobin of red blood cells. Bubbles rose to the top while oxygenated blood was removed from the lower part of the coil.
Heart-lung machine designed and built by Russell M. Nelson, M.D., used in first open heart operation in Salt Lake City, November 9, 1955, using a bubble oxygenator with an unique defoaming zone
“By turning the oxygen gas on, tiny bubbles were created which ascended along with the blood up this oxygenating column. Then as this column of foamy blood erupted over the top of the oxygenating column, we provided a zone of contact so that blood would pass over some copper material ... originally made to scrub pots and pans. [The copper] was daubed with a Dow-Corning compound known as silicone antifoam [causing] the bubbles... to burst allowing the gas to escape into the atmosphere.” Nelson RM
From 1942 to 1965, the County Hospital was also a clinical training facility for University of Utah medical students.
SURGEONS CONTRIBUTING TO HEART SURGERY IN UTAH

William Ray Rumel, MD

Performed first mitral valve commissurotomy in 1951 which was his enduring legacy, performing the operation on hundreds of patients, using instruments that he designed and manufactured.
Established Rumel Chest Clinic 1964
J. D. Mortensen, MD

Performed first open heart surgery on a child at LDS Hospital 1956. Performed first coronary enderectomy. Developed intravascular oxygenator
Conrad B. Jenson, MD

SURGEONS CONTRIBUTING TO HEART SURGERY IN UTAH

Harold V. Liddle, MD

Kent W. Jones, MD

Joined R.M. Nelson and C.B. Jenson in practice 1977 working at University of Utah Hospital. In 1980 he left the University for full time work at LDS Hospital and developed a large clinical practice of cardiac surgery.
SURGEONS CONTRIBUTING TO HEART SURGERY IN UTAH

Donald B. Doty, MD

SURGEONS CONTRIBUTING TO HEART SURGERY IN UTAH

William A. Gay, MD

Joined University of Utah College of Medicine as Chair, Department of Surgery 1984. Had pioneered use of cold potassium cardioplegia with Dr. Paul Ebert. Performed first heart transplant in Utah at University Hospital March 1985