

KENNETH MERLE BRINKHOUS

Thousands of persons across the world who suffer from hemophilia are now able to enjoy a normal life span because of the research of Kenneth Brinkhous. The Alumni Distinguished Professor Emeritus of Pathology in the School of Medicine at this University has been working for more than sixty years to discover ways to correct the symptoms of the genetic bleeding disorder. His work began in the 1940s with the discovery that the lack of the anti-hemophilic factor -- now known as Factor VIII -- results in the hemophilic condition. With two colleagues he devised a test to calculate the speed with which blood clots, and Dr. Brinkhous then went on to devise another test to measure how much Factor VIII is present in a patient's plasma. His research on the genetic basis of the disease enabled him to develop the first effective therapy for hemophilia, a concentrated factor made from human plasma. The concentrate, reconstituted with water and transfused, is now the standard therapy for hemophilia throughout the world. His work has led to additional breakthroughs in the treatment of other clotting disorders by using a derivative of snake venom to attract blood clotting platelets to injured blood vessels and sealing them. Today, more than a half century after his first discovery, Dr. Brinkhous is an acknowledged leader in the effort to achieve the ultimate cure for hemophilia, namely the replacement of the defective gene that causes the disease with a normal one. Two years ago the National Institutes of Health refunded his research, making him the first American investigator to receive continuous NIH research funding for 50 years.

A native of Iowa, his degrees in Chemistry and Medicine were taken at the University of Iowa. He served in the Army Medical Corps in World War II, rising to the rank of Commanding Officer. He came to the University of North Carolina at Chapel Hill as Chairman of the Department of Pathology in 1946 and continued in that role until 1973, helping to develop a pathology service for the new North Carolina Memorial Hospital and

for physicians, hospitals, and clinics throughout North Carolina. He created a distinguished teaching program in pathology for medical students, residents, dental students, and graduate students.

The pioneering achievements have been recognized with many honors, including the Gold Headed Cane, the highest award of the American Association of Pathologists given to the physician who represents "the highest ideals in medicine and pathology." He received an honorary Doctor of Science degree from the University of Chicago and more than twenty other state, national, and international awards. In 1961 the Consolidated University of North Carolina presented him with the O. Max Gardner Award for the "greatest contribution to the welfare of the human race."

Kenneth Brinkhous has justly been called the foremost scientist of the twentieth century in the field of blood coagulation. For the high quality of his research and for his contributions as a teacher and administrator to this campus and state -- tended by years of patient and persistent dedication -- this University takes special pleasure in awarding him this Doctor of Science degree.