

## Kenneth Brinkhous, MD, 92



Dr. Kenneth Brinkhous, one of nation's top medical researchers, dies at age 92

CHAPEL HILL -- Dr. Kenneth M. Brinkhous, who developed the first effective treatment for hemophilia and was the first scientist to receive 50 years of continuous research funding from the National Institutes of Health, died after a long illness at his Chapel Hill home Monday (Dec. 11). He was 92.

"Dr. Brinkhous was a truly remarkable man, a gentle, soft-spoken scientific and medical giant who pioneered treatment of a terrible disease that afflicted, among others, many of the royal families of Europe," said Dr. Jeffrey Hout, Dean of the School of Medicine at the University of North Carolina at Chapel Hill. "Among his almost unbelievable list of accomplishments was growing our pathology department from almost a one-man operation into one of the leading departments of its kind in the world. He will be greatly missed."

"A consummate scientist, Dr. Brinkhous was a source of seminal research on the mechanisms of blood clotting, an inspiring teacher and mentor and a national and international leader who helped to shape biomedical research in his time," said Dr. Stuart Bondurant, former Dean of the UNC School of Medicine. "His research contributions have saved and improved the lives of tens of thousands of children and adults in North Carolina and around the world."

Emeritus Professor of Pathology and Laboratory Medicine at the UNC-CH School of Medicine, Brinkhous was an Iowa native who attended the U.S. Military Academy and received his bachelor's degree from Iowa State University of Science and Technology in 1929 and medical degree there in 1932. The University of Iowa appointed him to its faculty in 1932, and he later rose to the rank of Lt. colonel in the Army Medical Corps during World War II.

The physician joined UNC-CH as pathology chairman in 1946. He wrote or contributed to more than 450 research papers and books,

served on the editorial boards of 18 journals, including the Proceedings of the National Academy of Sciences, and edited four journals.

"Kenneth Brinkhous was widely liked and appreciated on campus," said his friend and colleague Dr. John B. Graham, Distinguished Professor of Pathology and Laboratory Medicine Emeritus. "He once said to me that he 'may not be the smartest man in the world, but no one is willing to work harder.' This was demonstrated not only at his own institution, but also in national and international arenas."

"All of the advances made in hemophilia were made on the basis of what was started here in 1946 when Dr. Brinkhous came here," said Dr. Harold R. Roberts, Kenan Professor of Medicine. "Fifty years ago, many hemophiliacs did not survive to adulthood. Today, patients with classic hemophilia can now live a virtually normal life span because of the advances that Dr. Brinkhous made. His research is Nobel Prize caliber."

While at Iowa, Brinkhous discovered that hemophiliacs could not make a blood-clotting factor he named antihemophilic factor and which now is called factor VIII. Although not the disease's cause, lack of the protein results in life-threatening symptoms such as uncontrolled bleeding. At Chapel Hill, he and colleagues explained the genetics underlying disease transmission and showed that hemophilia also occurs in females.

They also developed a test to detect clotting disorders, the partial thromboplastin test, that is still used millions of times a day around the world and showed they could control hemophilia by first replacing Factor VIII through blood plasma. Another breakthrough was learning to purify and concentrate Factor VIII so that it worked far better. Brinkhous also became a world leader in explaining von Willebrand's disease, the clotting effects of snake venom and blood clotting leading to stroke and heart attacks.

Among his many honors were the American Association of Pathologists' top Gold Headed Cane Award, election to the American Academy of Arts and Sciences, the National Academy of Sciences and the Institute of Medicine and honorary doctorate degrees from UNC-CH and the University of Chicago. He was named Alumni Distinguished Professor at UNC-CH and recipient of the O. Max Gardner Award from the UNC Board of Governors, both in 1961. The university named both its Brinkhous-Bullitt Building and an endowed professorship in his honor. In 1969, he received the North Carolina Award in Science.

Brinkhous is survived by his wife, Frances Benton Brinkhous; a son, John R. Brinkhous and his wife Florence; and a daughter-in-law, Ann Brinkhous, all of Chapel Hill. Other survivors are three granddaughters, Renee McCombs of Northville, Mich., Carol Wertz of Cramerton, N.C. and Heather Brinkhous of Chapel Hill and a great grandchild, Megan McCombs.

"In all my life, I never heard him say an unkind thing about another human being on the planet," said John Brinkhous.

A family service will be held at the old Chapel Hill cemetery at a later date. Friends and colleagues are invited to pay their respects at the home of John Brinkhous at 201 Oak Park Drive Thursday (Dec. 14) from 3-6 p.m.

In lieu of flowers, the family asks that gifts be made to:

Medical Foundation of North Carolina  
880 Airport Road  
Chapel Hill, N.C. 27514

or to:

National Hemophilia Foundation  
116 West 32nd St., 11th Floor  
New York, N.Y. 10001