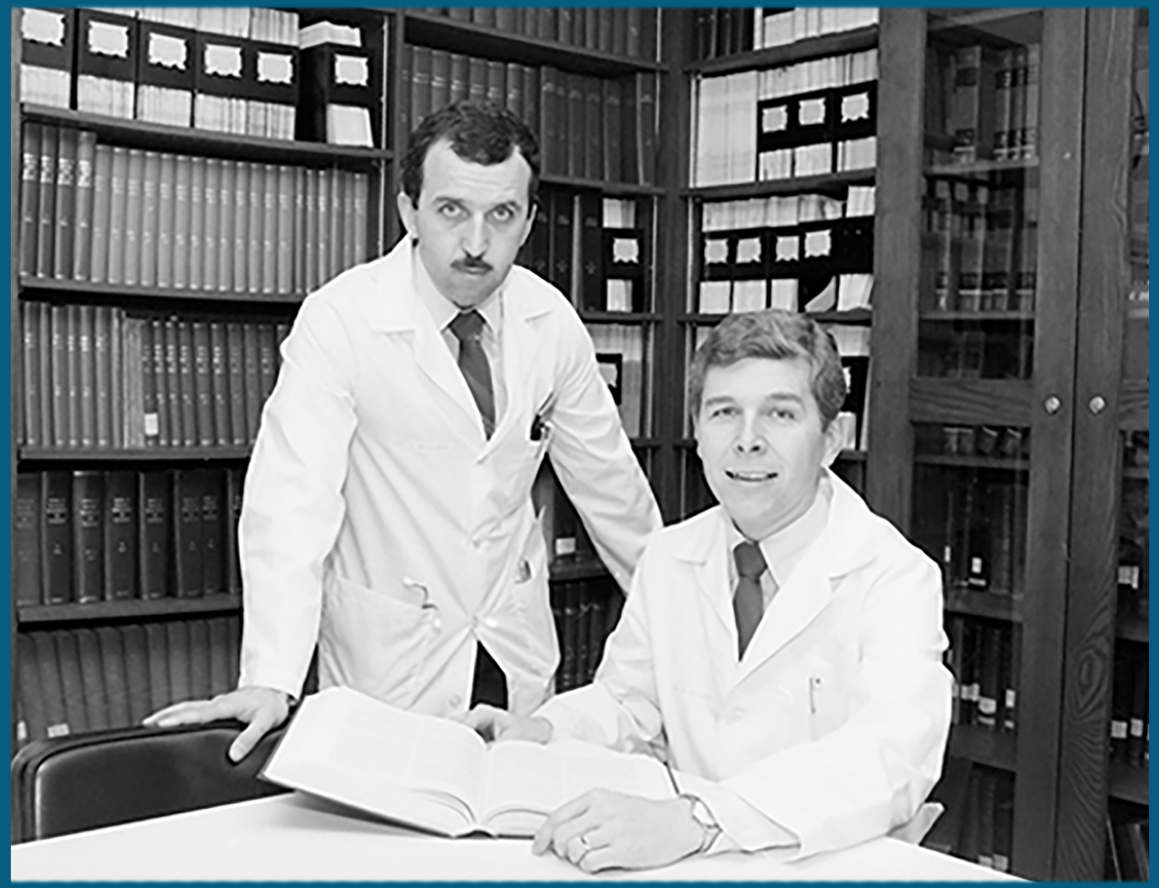
The University of Iowa is a national leader in stroke care, starting during the era of Adolph Sahs. Dr. Sahs was Principal Investigator of the NIH Cooperative Study on Aneurysmal Subarachnoid Hemorrhage, which was the first clinical trial in the nation in stroke. In 1977, Harold Adams started the University of Iowa Stroke Registry. The Department is currently a regional coordinating center for clinical stroke research in "StrokeNet", an NIH sponsored network for clinical trials, with Enrique Leira as Principal Investigator.

The Iowa Stroke Team 1985

Front row: David Beck, David Boarini, Jose Biller, Harold Adams, John Godersky, Neill Graff-Radford, Adolph Sahs

Back Row: Gail Kongable,Vicki Shaffer, Eileen Berlinger, Mark Ross, Linda Gustafson, John Sand, Patty Johnston, Linda Jordan, Anthony Kitslaar, K Kirkman, Danette Frauenholtz



Harold Adams and Jose Biller, shown here in 1985, are internationally prominent figures in the field of stroke care.

Measurements of Acute Cerebral Infarction: A Clinical Examination Scale

Thomas Brott, MD, Harold P. Adams Jr., MD, Charles P. Olinger, MD, John R. Marler, MD, William G. Barsan, MD, José Biller, MD, Judith Spilker, RN, Renée Holleran, RN, Robert Eberle, Vicki Hertzberg, PhD, Marvin Rorick, MD, Charles J. Moomaw, PhD, and Michael Walker, MD

We designed a 15-item neurologic examination stroke scale for use in acute stroke therapy trials. In a study of 24 stroke patients, interrater reliability for the scale was found to be high (mean κ=0.69), and test-retest reliability was also high (mean κ=0.66–0.77). Test-retest reliability did not differ significantly among a neurologist, a neurology house officer, a neurology nurse, or an emergency department nurse. The stroke scale validity was assessed by comparing the scale scores obtained prospectively on 65 acute stroke patients to the patients' infarction size as measured by computed tomography scan at 1 week and to the patients' clinical outcome as determined at 3 months. These correlations (scale–lesion size r=0.68, scale–outcome r=0.79) suggested acceptable examination and scale validity. Of the 15 test items, the most interrater reliable item (pupillary response) had low validity. Less reliable items such as upper or lower extremity motor function were more valid. We discuss methods for improving the reliability and validity of brief examination scales to be used in stroke therapy trials. (*Stroke* 1989;20:864–870)

Harold Adams and Jose Biller helped develop the "NIH Stroke Scale," which is the standard clinical rating instrument used worldwide to assess the severity of ischemic stroke for candidates for thrombolytic therapy (TPA).