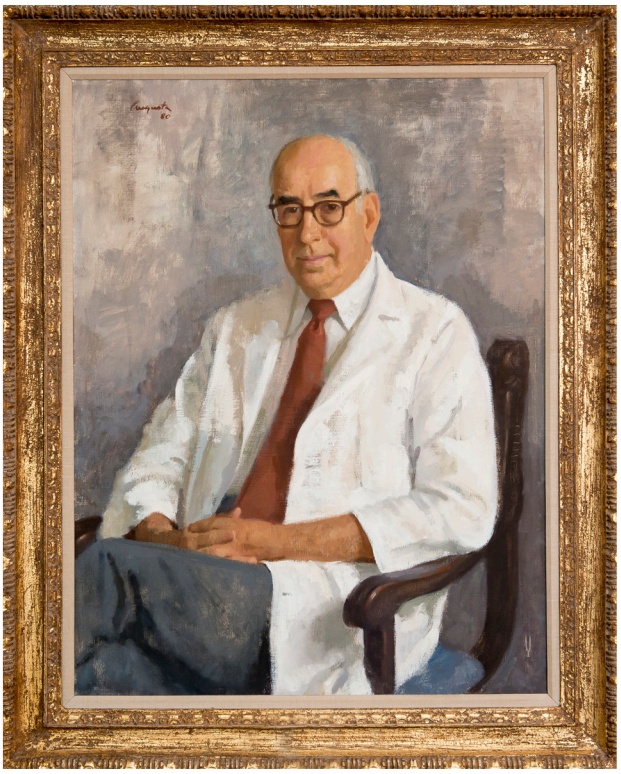
THE FACULTY OF MEDICINE
Harvard University

C. Miller Fisher



Photograph of Portrait Painting Courtesy of MGH Photo Lab

Charles Miller Fisher was born in Waterloo, a small town in Southern Ontario Canada. His mother died when he was 11 years old. Miller (as he preferred to be called) and his 9 siblings were raised mostly by his father. Even as a young boy, he was often referred to as *doctor*. In 1931, Fisher went to Toronto where he was determined to learn to become a physician. He chose the difficult 4-year Biology and Medicine curriculum followed by 4 years of standard Medical subjects. He praised his basic science mentors but clinical work was decidedly non-academic. After graduation, Fisher took a competitive written examination for an internship at Henry Ford Hospital in Detroit, Michigan. A letter arrived a few days after the examination, informing him that he was accepted for this prized internship beginning July 1, 1938. He gained valuable clinical experience during this internship.

Because Fisher was a Canadian citizen, his stay in Detroit was limited by statute to one year. He returned to Canada in the summer of 1939 and volunteered for the Canadian reserve militia. He married Doris Stiefelmeyer in Montreal, Quebec, on November 25, 1939. He had met Doris during high school and had intermittently kept in close contact with her since then. On September 3, 1939, soon after Hitler's army invaded Poland, Canada officially entered the war joining the United Kingdom. While waiting for active duty Fisher gained experience on the general medical wards of the Royal Victoria Hospital in Montreal.

On May 4, 1940, Miller Fisher was commissioned as a Surgeon-Lieutenant in the Royal Canadian Navy. On April 4, 1941, while on duty, his ship was sunk by a German destroyer, and, after hours of floating in the ocean, he was picked up by a German Naval ship. He was taken to the Stalag XB camp located in Sandbostel, Germany where he spent the next 3 ½ years as a medical officer in a Prisoner of War. Camp. He had abundant time to think and to try and distract his mind away from the carnage of the camp, the irascible German guards, the desperate state of the prisoners, and the war. During this time, despite the drudgery, he was able to educate himself in German, science, and literature.

When he resumed his medical career in Canada, he intended to focus on diabetes and metabolic diseases.

In tribute to their dedicated efforts to science and medicine, deceased members of the Harvard Faculty of Medicine (those at the rank of full or emeritus professor) receive a review of their life and contributions with a complete reflection, ***a Memorial Minute****.*

As part of a medical refresher course, he had a rotation at the Montreal Neurological Institute, where on morning bedside rounds he came to the attention of Wilder Penfield, the institute's legendary chief. Penfield recognized Fisher's inquiring mind and became his mentor. He arranged an acting-registrar (residency) position for Fisher at the institute (1948-1950) and later encouraged Fisher to do a neuropathology fellowship with Raymond D. Adams, at Boston City Hospital (1949-1950). Under the tutelage of Professor Derek Denny-Brown and Adams, he learned the tools of Neuropathology and made early observations on brain embolism.

At age 36 years, Fisher returned to Montreal and set up a Neuropathology laboratory at the Montreal General Hospital. He spent clinical time at several Veterans facility in Montreal. His experience in the clinic and laboratory led to observations that resulted in his groundbreaking report in 1951 that carotid artery disease in the neck was an unrecognized and critical cause of stroke. He made important observations on transient loss of vision in an eye. He learned that strokes were often preceded by brief warning signs, which he named transient ischemic attacks. He anticipated that carotid-related stroke could be prevented with newly introduced anticoagulation and surgical therapies. He also analyzed the distribution of atherosclerotic disease in the arteries that supplied the brain. He became determined to vigorously pursue a career in Cerebrovascular disease.

In 1954, Adams was asked to develop a Neuromedical Service at the Massachusetts General Hospital (MGH). He invited Fisher to return to Boston to join him. This began an intensive collaboration that ultimately impacted the construct and culture of neurology, including the recognition of stroke disease as primarily a neurologic rather than internal medicine discipline. After moving to Boston, he devoted his career and the great majority of every waking day to the study of the brain and stroke, both in the pathology laboratory and in people. He created the first stroke training program. He was the first fulltime Stroke Neurologist in the United States. He is best known for his many seminal contributions to stroke, for example, the discovery not just of carotid stenosis but also of carotid dissection as a cause of stroke; the knowledge that atrial fibrillation was a frequent stroke substrate and that initial strokes owing to atrial fibrillation were often catastrophic; recognition of the clinical and pathologic features of thalamic and cerebellar hemorrhage; description of the major clinical and pathologic syndromes of lacunar infarction; reporting that migrainous accompaniments were important causes of stroke-like events in the elderly; and formulation of the Fisher score for the severity of aneurysmal subarachnoid hemorrhage based on computed tomographic evidence of the volume distribution of blood in the subarachnoid spaces. He also made numerous innovative contributions to general neurology, including description of the following syndromes and phenomena: Miller Fisher syndrome a variant of Guillain-Barre syndrome; normal pressure hydrocephalus; transient global amnesia; one-and-a-half syndrome; wrong-way eyes; pontine ptosis; oval pupils; and rostral-caudal brain deterioration in the comatose patient. Frequent collaborators in his stroke and general neurology contributions included Adams, Maurice Victor, E. P. Richardson, and Robert Ojemann. Even as he approached the age of 96 years, Fisher still published journal articles.

He received many honors and awards, the most singular of which are his induction into the Canadian Medical Hall of Fame; the creation of the annual C. Miller Fisher Award for excellence in stroke care/research by the New England Branch of the American Heart and Stroke Association; and at MGH, the establishment of the C. Miller Fisher Chair of Neurology, the creation of the CMF Annual Stroke Lecture, and the renaming of the Vascular Neurology Service, one of the two MGH inpatient services, as the CMF Service. In the weeks before his death, the 3-decade-old Greater Boston Stroke Society was renamed the C. Miller Fisher Society.

Above all, he was a consummate physician and teacher, always generous with his time for patients, peers and students alike. He was the master of clinical pathological correlation. Often, he would say "I always learn something from each patient".

Fisher's discoveries and contributions and those of the individuals that he trained changed the knowledge basis of stroke and vascular disease for everyone who practiced medicine and neurology in the latter half of the twentieth century and the beginning years of the twenty first century. Miller Fisher played a leading role in catapulting stroke into prominence by the end of the twentieth century.

Respectfully submitted,

Louis R. Caplan MD, *chairperson*
J. Philip Kistler , MD
Allan H. Ropper, MD