



Claudia F. Lucchinetti, M.D.

Professor of Neurology



Claudia F. Lucchinetti, M.D., is a consultant in the Department of Neurology at Mayo Clinic in Rochester. Dr. Lucchinetti serves as chair of the Department of Neurology and assistant director of the Mayo Clinic Center for Multiple Sclerosis and Demyelinating Diseases. She was a recipient of the Frontiers in Neurology award from the American Academy of Neurology. Dr. Lucchinetti recently completed her tenure as chair of the CNBT NIH study section from 2012-2014. She holds the academic rank of professor of neurology, College of Medicine, and holds full faculty privileges in clinical and translational science at Mayo Graduate School. Dr. Lucchinetti is recognized with the distinction of a named professorship, the Mary Lowell Leary Professorship.

Dr. Lucchinetti received the B.S. degree in biology from Northwestern University. She earned the M.D. degree from Rush Medical College in Chicago, Illinois. After an internship at Rush-Presbyterian-St. Luke's Medical Center, she was a neurology resident at Mayo Graduate School of Medicine. Dr. Lucchinetti also completed a fellowship in neuro-immunology at Mayo Clinic, with additional subspecialty training as a Mayo Foundation Scholar in experimental neuropathology at the Brain Research Institute in Vienna, Austria.

Dr. Lucchinetti has an active clinical practice and is recognized as an international referral source for the evaluation of patients with multiple sclerosis, neuromyelitis optica, and complex inflammatory demyelinating central nervous system disorders. Her research focuses on the immunopathology and pathogenesis of MS, NMO and acute disseminated encephalomyelitis. Dr. Lucchinetti was principal investigator of the MS Lesion Project, an international collaborative study funded by the National Multiple Sclerosis Society to investigate the clinical and radiological correlates of the MS lesion. Her research is also funded by the National Institute of Neurological Disorders and Stroke, the United States Department of Defense, and several industry grants. Dr. Lucchinetti has achieved publication in prominent journals, including *New England Journal of Medicine*, *Lancet Neurology*, *PNAS*, *Annals of Neurology*, *Brain*, and *Neurology*. She has authored numerous peer-reviewed manuscripts, book chapters and editorials.

Dr. Lucchinetti's research has contributed novel insights underlying the mechanisms of tissue injury in patients with early stages of MS and other central nervous system inflammatory demyelinating disorders. She first-authored an important peer-reviewed study describing four different patterns of tissue damage in early MS, which suggested that MS lesions may form differently between different MS patient subgroups. In 2002 she proposed that NMO was an antibody-mediated disease targeting the perivascular space, which has ultimately been confirmed in subsequent Mayo Clinic studies, wherein both the biomarker and target antigen in this disease were identified. Her laboratory is now focused on better understanding the immunological consequences of this antibody on astrocyte function in NMO. Most recently, Dr. Lucchinetti's research described evidence for early inflammatory cortical damage in MS, which suggests that the disease may progress from the outermost layers of the brain into the deeper brain regions. This sheds more light on the underlying disease activity that may occur in people in the earliest stages of MS. Understanding the sequence and timing of nervous system-damaging events in MS may lead to identification of novel treatment strategies aimed at limiting this tissue damage and stopping MS disease progression.