

Maria A. Nagel, MD

Dr. Nagel is Professor and Cockerill Wittmus Endowed Chair in Neurology at the University of Colorado Anschutz Medical Campus. As a physician-scientist, she brings a unique approach to the diagnosis and management of complex patients with multisystem and rare “mystery” diseases frequently arising from a constellation of infection, autoimmunity, and immune dysregulation.

Dr. Nagel received her undergraduate degree with honors in Biological Sciences at the University of Chicago where she contributed to early studies in tumor immunology with Dr. Hans Schreiber. She received her medical degree from the University of Illinois Urbana-Champaign. At the University of Colorado Health Sciences Center, she completed her Neurology Residency and Neurovirology Fellowship under the late Dr. Don Gilden, focusing on varicella zoster virus (VZV) vasculopathy. Since 2006, Dr. Nagel has built a reputation as a world expert in herpes zoster and other neurological complications of VZV. Because VZV is neurotropic and can produce disease in various organs and vessels, Dr. Nagel has also expanded her practice to treat patients with multi-system diseases due to pathogens and other etiologies. Due to her ability to empathize with patients, synthesize complex histories, and diagnose/manage neuropathic pain and multi-system diseases, she received a University of Colorado Hospital Grateful Patient Award, was featured in local and international popular news articles, and received grateful patient donations to support her clinical, research and education efforts. With her reputation and success in treating complex cases, her practice has expanded to encompass patients across multiple states, including New York and Arkansas, as well as Canada, Mexico, Brazil, Switzerland, and Italy.

Dr. Nagel has a robust track record in research. She has led a National Institute of Health/National Institute on Aging Program Project focusing on VZV vasculopathy, giant cell arteritis, and aberrant inflammation since 2016. During this period, she received >\$1mil in administrative supplements to investigate how VZV accelerates dementia. Dr. Nagel has also received NIH R01s to investigate the role of viral exosomes in stroke and the role of olfactory system infection in Alzheimer’s disease. During the COVID pandemic, Dr. Nagel and her colleague in India received an Indo-US Science and Technology Forum grant and demonstrated that Neem bark extract had antiviral properties against SARS-CoV-2. She also consulted for the Global Solutions Institute, supported by the Club de Madrid and the P80 Group Foundation, in evaluating anti-SARS-CoV-2 drugs from Cuba. As a member of the NASA Astronaut Health Advisory Committee, Dr. Nagel has contributed to health guidelines for prolonged spaceflight, conducted research on the health of Antarctic expeditioners, and is currently assessing the success of Shingrix in preventing VZV reactivation on the International Space Station. Her most recent collaboration with the FDA and the former NCTR Director, Dr. Ron Hart, has identified the pacemakers of aging in the hippocampus, essential in the prevention of dementia. Dr. Nagel serves as a standing member of the NIH Clinical Neuroimmunology and Brain Tumor Study section and is a Board Member for the International Society for Neurovirology. She has published >125 clinical and basic research articles, reviews, and book chapters and presented at multiple international virology and Alzheimer’s disease meetings.