Dr. Benveniste’s research focuses on using magnetic resonance imaging (MRI) approaches to understand mechanisms of disease in the central nervous system. Over the past several years, the research focus has been on probing the role of the glymphatic system in the normal brain and in states of neurodegeneration including cerebral small vessel disease (cSVD) and Alzheimer’s disease (AD). Preclinical MRI studies are also underway to understand how the brain’s waste removal pathways are affected in different states of arousal including general anesthesia. Dr. Benveniste pioneered our current understanding and visualization of the glymphatic system, which removes the brain’s waste products including beta-amyloid.