

Department of Neurological Surgery

Title: "A Dynamic Intrasaccular Biodegradable Polymer for Accelerated Remodeling of Cerebral Aneurysms."

PI: Chander Sadasivan, Neurosurgery

Co-Investigator: Miriam Rafailovich, Materials Science and Chemical Engineering

The project involves development of a liquid embolic agent for endovascular treatment of brain aneurysms. The agent will be injected as a liquid, which then polymerizes within minutes to completely occlude the aneurysm. Biodegradation of the polymer is then triggered by metalloproteases released naturally during the final stages of wound healing. Thus, each patient's vasculature will be returned to baseline with no evidence of the pathology or treatment.