

Joanna J. Phillips



She is an Assistant Professor of Neurological Surgery and Pathology, Division of Neuropathology, and she directs the Brain Tumor Research Center Biospecimen Core at the University of California, San Francisco. Work in her research laboratory is focused on understanding how invading brain tumor cells interact with components of the tumor microenvironment and how these key interactions influence brain tumor initiation, progression, and invasion. Heparan sulfate and chondroitin sulfate proteoglycans are abundant in the brain tumor microenvironment. The Phillips laboratory and others have demonstrated the role for proteoglycans and their alterations in brain tumorigenesis.

Current studies are investigating the molecular mechanisms by which proteoglycans drive brain tumor development and the potential use of altered proteoglycans as therapeutic targets and biomarkers of disease. Areas of interest: Brain cancer, proteoglycans, tumor microenvironment, tumor biomarkers