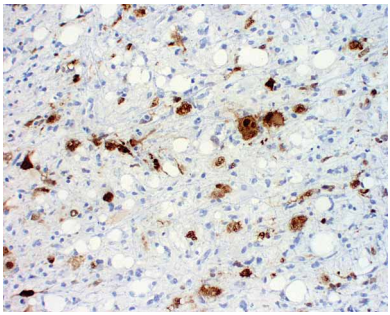
# UW Medicine Neuropathology

UW Medicine

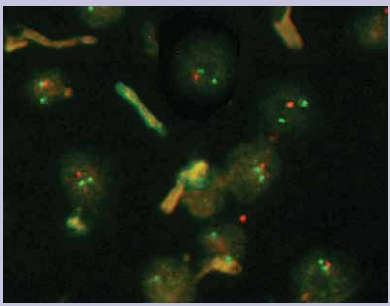
## Brain Tumors



*Immunohistochemistry of a brain tumor.*

UW Medicine Neuropathology provides fast turnaround service for all types of neurosurgical specimens. We will contact the referring physician the day the specimen is first reviewed. Specialized services include a large panel of immunohistochemical protocols as well as molecular studies for typing and grading glial neoplasms, including determining deletions of chromosome 1p and 19q. For pituitary lesions our immunohistochemical evaluation includes TSH, LH and FISH. For metastatic carcinoma we provide a full panel of antibodies for assessing primary source. A full panel of surface markers is used for lymphoid subtyping.

## FISH



UW Medicine Neuropathology specializes in Fluorescence In Situ Hybridization (FISH) in support of our diagnostic and research services. The FISH image to the right is a composite micrograph of fluorescence microscopy from hybridization of 1q (green signal) and 1p (red signal) probes used in the molecular characterization of oligodendroglial neoplasms. The rounded oligodendroglial nuclei are seen faintly with generally 2 signals from the 1q chromosome arm (control) and 1 signal from the 1p chromosome arm, indicative of a deletion of 1p. The Appearance for a 19q deletion is similar (not shown). Studies indicate that deletions of 1p and 19q c hromosome arms are much more common in oligodendroglial neoplasms compared to other gliomas and there is improved prognosis when these deletions are found.