Intraocular lymphomas are a heterogeneous group of malignant neoplasms. Vitreoretinal lymphomas (VRL) are high-grade B-cell malignancies and are associated with a poor prognosis, with most patients dying of CNS disease. Immunophenotyping and somatic mutation analyses indicate that these lymphomas are probably derived from early post-germinal centre cells. Primary choroidal lymphomas are typically low-grade indolent B-cell tumours with morphological, immunophenotypical and genotypic features similar to extranodal marginal zone B-cell lymphomas elsewhere in the body. The putative cell of origin is the post-germinal centre (memory) B cell. Primary iridal lymphomas are very rare, with an equal distribution of B- and T-cell types and with a variable clinical course, most patients succumbing to their disease as a result of systemic dissemination. Secondary vitreoretinal lymphomas develop from PCNSL whereas secondary uveal lymphomas/leukaemias occur in patients with advanced systemic lymphoma or leukaemia, respectively. The lecture will provide an overview of these different intraocular lymphomas and relate them, particularly VRL, to CNSL.