

Dr Svetlana Cherepanoff (Anatomical Pathology) 2009 RCPA Foundation Technical Assistance Grant

Project title: Tumour-associated macrophages and uveal melanoma cell expression of melanoma inhibitory activity (MIA) in human eyes.

“This grant enabled me to undertake independent research as a trainee by providing the funding for the antibodies and the detection method reagents. Uveal melanoma is the commonest primary intraocular cancer in adults. Mortality is high - up to 60% for larger tumours-and there is no current cure. Death is caused by tumour metastasis. Mechanisms by which this happens are unclear and the subject of intense research. MIA is a protein involved in cell-matrix interactions. High MIA levels in the serum of uveal melanoma patients is associated with metastatic disease. The project examined whether increased numbers of tumour infiltrating macrophages might be associated with increased tumour MIA expression, a proof of principle observation that would drive future research. The project allowed me to have direct experience leading a small research project, troubleshooting technical difficulties, digitising microscopic slides and quantifying results. An undergraduate research student assisted in the analysis, giving me important research supervision experience. The results comprised the preliminary data upon which a larger study was conducted, currently being prepared as a manuscript. Below are some images of the findings.”