



Project Title: Screening drug candidates for Uveal Melanoma		Code: SPS14
Host School / Institute: Sydney Pharmacy School		Address: Pharmacy And Bank Building, A15, Camperdown Campus
Certificates & Clearances required: No		
Primary Supervisor: Dr Fanfan Zhou		
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Co-Supervisor/team: Team will include a second year PhD student who will assist in training.		
Project Type: Laboratory based		
Project Category: Cancer; Pharmacology; Pharmacy		
Skills / Attributes of a successful student: The selected student should be keen on the project and dedicated to the work. The student is expected to adapt well in a team work environment. Molecular biology, pharmacology, pharmaceutical science or biochemical background is desired, but not essential. The student will be trained for all required techniques.		
Project Keywords: Uveal melanoma; drug screening; vision; cancer		
<p>Project Description: Uveal melanoma (UM) is the most frequent non-cutaneous melanoma and the most common form of primary eye cancer in adults. Although rare, it is deadly. Currently, the frontline treatments for UM include endoresection, radiation therapy and enucleation. Vision impairment/loss or loss of eye(s) are common clinical outcomes for these patients. Although the localized primary tumor may be well controlled, ~50% of patients will develop metastatic disease (up to 20 years afterward), with a dismal survival outcome of <1 year. There are no effective therapies to prevent metastatic spread or reduce the mortality of UM. As such, exploring new therapeutic agents for this potentially deadly tumor are necessary.</p> <p>This project will identify drug candidates to treat UM by screening several anti-cancer drugs and natural compounds available in the laboratory and molecularly characterize the identified drug candidates, if time allows. The outcome of this study will inform us of potential new compounds/agents for treating UM with the molecular mechanisms underpinning the observed pharmacological effects. The information generated from this study will provide significant preliminary data for further research on these drug candidates against UM. The techniques involved in the project will include tissue culture, cell viability assay and western blot.</p>		