

Victoria

Ludwig Institute for Cancer Research Limited

FT0992234 A/Prof JM Mariadason

Approved Project Title **Role of Histone deacetylase 3 (HDAC3) in intestinal epithelial cell homeostasis and tumorigenesis**

2009 : \$ 85,800

2010 : \$ 171,600

2011 : \$ 171,600

2012 : \$ 171,600

2013 : \$ 85,800

Primary RFCD 2701 BIOCHEMISTRY AND CELL BIOLOGY

Administering Organisation Ludwig Institute for Cancer Research Limited

Project Summary

Colon cancer is the most common cancer that affects men and women in Australia. Annually, in Victoria alone, more than 3400 people are diagnosed with colon cancer. Colon cancer arises through the accumulation of mutations in key genes over time. Identification of cancer causing genes provides the basis for the design of new cancer therapies. We recently identified a gene called Histone deacetylase 3 (HDAC3) as potentially involved in promoting colon cancer. The current proposal will now extend and validate this finding in mice. Importantly, drugs which inhibit HDAC3 have recently been developed for the treatment of cutaneous T-cell lymphoma. Defining the role HDAC3 plays in colon cancer will justify testing these drugs in colon cancer patients.