

Summary of Discovery Projects Applications for Funding to Commence in 2006

Victoria

Walter & Eliza Hall Institute of Medical Research

DP0666603 Dr G Dewson

Approved Project Title **Elucidating the regulation of cell death by random mutagenesis of key apoptotic proteins**

2006 : \$74,340

2007 : \$74,340

2008 : \$74,340

Primary RFCD 2701 BIOCHEMISTRY AND CELL BIOLOGY

APD Dr G Dewson

Administering Institution Walter & Eliza Hall Institute of Medical Research

Project Summary

All organisms need to remove damaged or excessive cells. This cell death process is called apoptosis. Defects in apoptosis result in numerous diseases including cancer, and neurodegenerative and immune disorders. Determining how this process is regulated is of crucial importance for therapeutic intervention. We will utilise a powerful strategy to mutate proteins required for apoptosis so that they no longer work, which will allow the identification of protein regions essential for cell death activity . This will lead to identification of potential drug targets to control apoptosis. Elucidating the mechanism of cell death will lead to the development of novel and improved therapies for diseases such as cancer and neurodegenerative disease.