

Under the Microscope with Clinical Associate Professor John Burnett

Two Royal Perth Hospital Professors have received \$387,500 from the National Health & Medical Research Council to investigate the protective effects of low cholesterol.

Royal Perth Hospital's Clinical Associate Professor John Burnett and received the research grant along with Associate Professor Hugh Barrett from the University of Western Australia.

Clinical A/Prof John Burnett said although cardiovascular disease was an increasing problem in Australia, the cause of blocked arteries was not completely understood.

"Apolipoprotein B (apoB), the main protein of LDL or 'bad' cholesterol plays a central role in transporting fats in the blood – and elevated levels of this protein are characteristic of many forms of high cholesterol," A/Prof Burnett said.

"The focus of this research is to explore the regulation of the protein of bad cholesterol, apoB, using people who have inherited abnormally low levels of LDL cholesterol in the blood," he said.

"Such low levels protect people from heart disease and usually lead to longevity."

The study will determine the alterations in the *APOB* gene causing the low LDL cholesterol levels.

"We will also establish if these gene changes affect the production and/or clearance of blood fats in affected individuals when compared to controls," he said

"The aim is to reveal new protective mechanisms and potentially aid in the development of strategies to suppress over-production of apoB found in individuals with high blood cholesterol."