

healthy body healthy mind

Researchers target melanoma

WA scientists have funding for two new projects that hold the promise of making chemotherapy drugs more effective in treating melanoma, as well as uncovering new ways to tackle the aggressive skin cancer.

One study will be led by WA Institute for Medical Research (WAIMR) research associate Dr Keith Giles and one will be spearheaded by WAIMR-based Molecular Discovery Systems' scientist Robin Scaife of Nedlands.

Both projects have received \$75,000 grants from the Scott Kirkbride Melanoma Research Centre (SKMRC).

Dr Scaife said that while new experimental drugs that targeted growth pathways involved in melanoma were showing very promising clinical results, researchers were now also realising that there were several ways to make current chemotherapy drugs more powerful.

"Although there is a substantial arsenal of anti-



Finding new ways to tackle melanoma are, from left, Dr Keith Giles and Dr Robin Scarfe with, rear, WA Institute for Medical Research's senior researcher Mike Epis and acting director Professor Peter Leedman.

cancer weapons available, melanomas can be particularly challenging because they often don't respond well to chemotherapy, making them difficult to treat," he said.

opening up the possibility of using current chemotherapy drugs with more success.

"By further exploiting the sensitivity of cancerous cells when they undergo division, we intend to hit

We are investigating if these molecules have the power to slow the progress of melanoma cell growth, and also if their presence may make melanoma cells more sensitive to some chemotherapy drugs.

"Recent investigations looking at cell division have, however, brought to light potential new strategies to target chemo-resistant cancerous cells,

melanoma cells where it hurts the most.

"The Molecular Discovery Systems laboratory at WAIMR is home to powerful, semi-

automated cell imaging and analysis equipment that we will use to screen for drugs that target complex cellular properties."

Dr Scaife and his colleagues, WAIMR director Professor Peter Klinken and University of WA Professor Jiake Xu, will use this cutting-edge, high content imaging and analysis technology to try to identify new drug leads to tackle melanoma.

Dr Giles's study involved looking for new approaches to prevent melanoma growth and invasion by focusing on two micro RNA molecules found to be linked to melanoma.

"We are investigating if these molecules have the power to slow the progress of melanoma cell growth, and also if their presence may make melanoma cells more sensitive to some chemotherapy drugs," Dr Giles said.

"We're very excited to be able to conduct this research as, unfortunately, melanoma rates continue to increase in Australia, with more than 10,000 cases diagnosed annually."