Cure Cancer Australia Foundation funds melanoma targeting project

Ludwig Institute for Cancer Research's (LICR) Dr Andreas Behren has been granted funding of $180,000 over two years from Cure Cancer Australia Foundation's YI Postdoctoral Fellowship 2012/2013 for his project on the identification and targeting of melanoma cells undergoing EMT to interfere with metastasis and chemoresistance.

Dr Behren said melanoma is a common and highly aggressive form of skin cancer. "Currently there are few treatment options once the disease has spread. Through our project we aim to understand why some melanoma cells are able to migrate from the original tumour to other sites in the body (metastasis) and why some cells are able to withstand the treatment with drugs. If we can understand the process, and the changes that take place to allow it, we will be able to understand why resistance against current therapies emerge".

The study will use a model that includes human melanoma samples to study melanoma metastasis. Using tumour cells directly from human melanoma tissues will allow the LICR team to further investigate how a subpopulation of slow-cycling cells within human melanoma cell lines acquires a metastatic phenotype and resists chemotherapy. This may therefore lead to the identification of new therapeutic targets to block invasion and to overcome the resistance of the cancer cells to current treatments.

Professor Jonathan Cebon, Member, Director Medical Oncology Unit LICR Melbourne-Austin Branch said finding new ways to treat melanoma patients before and once the tumour has spread is an important goal for melanoma researchers.

"Dr Behren's project is an important step in helping to develop new ways to treat the disease more effectively that could in turn transform the medical care and treatment of melanoma patients and extend and enhance the quality of their lives. The study will aid the understanding of the biology of melanoma, in particular of the cells that spread from the original tumour and potentially the identification of new treatments for controlling metastasis in melanoma patients".

LICR is the largest international academic institute dedicated exclusively to understanding and controlling cancer, with a number of laboratory and clinical sites around the world, working to improve patient outcomes through integrated programs that translate basic laboratory discoveries into patient benefits through conducting its own clinical trials. LICR is also a founding partner of the Olivia Newton John Cancer and Wellness Centre at Austin Health, which has a focus on the development of innovative cancer therapies, and providing quality of life to patients with cancer.