

Ground breaking cancer research finds immune system link

May 24 2013, by Susanna Wolz

(Medical Xpress)—Curtin University researchers have found evidence that targeting specific cells in the body can reverse the effects of cancer on the immune system.

Dr Connie Jackaman, Early Career Development Fellow at the Curtin Health Innovation Research Institute (CHIRI), is leading a study focused on the capacity of the immune system in older people to deal with cancers.

The research tracked particular cells within the immune system of young and geriatric mice, finding that deterioration, caused by mimicked conditions of lung cancers, could be reduced by activating other cell types.

Dr Jackaman said that the immune system in elderly people, even those who were healthy, was skewed towards [immune suppression](#) but this could be mediated by targeting 'macrophages', a cell found in the immune system.

"The most important outcome from this study was that activating these [macrophages](#) restored both age-related and tumour-induced [immune dysfunction](#)," Dr Jackaman said.

"That is, we could make elderly cells young again by targeting them in the right way, the outcome of which could have real implications for [cancer immunotherapy](#) in the elderly."

Although this is the first research undertaken on this topic, the team are confident these findings will have a positive impact on cancer and mesothelioma treatment.

The article was published in the top journal in the field of [gerontology](#) and geriatrics, *Aging Cell*. To read the full research article, please visit onlinelibrary.wiley.com/doi/10.1111/ace.12062/pdf

Provided by Curtin University

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