

How does the tumour suppressor, *p53*, protect us from Cancer?

Prof Andreas Strasser PhD

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Dr. Strasser is the head of the Molecular Genetics of Cancer Division at The Walter and Eliza Hall Institute (WEHI) in Melbourne, Australia. He completed his Master of Science and Ph.D. at the Basel Institute for Immunology and University of Basel in Switzerland before joining WEHI as a postdoctoral fellow in 1989. He studies programmed cell death and how defects in apoptosis cause cancer or autoimmune disease and impair the response of tumor cells to anti-cancer therapy. Dr. Strasser and his colleagues were the first to discover that abnormalities in cell death can cause cancer and autoimmune disease, including the discovery that BCL-2 collaborates with the *MYC* oncogene in tumorigenesis. Their studies have determined which pro-survival BCL-2 family member are essential for the sustained growth of which cancers. They also found that BCL-2 and death receptors regulate distinct pathways to apoptosis and have studied how the individual and overlapping roles of these two apoptotic pathways function in the immune system. Dr. Strasser discovered BIM and BMF, and was the first to show that BH3-only proteins are essential for the initiation of programmed cell death and stress-induced apoptosis. Based on this work, a collaboration between WEHI (including the Strasser group), Genentech, and AbbVie led to the development of the BCL-2 inhibitor Venetoclax/ABT-199, which is approved for treatment of refractory chronic lymphocytic leukemia, while a similar collaboration with Servier yielded the first potent and selective inhibitor of the cell death inhibitor MCL-1, currently in clinical trials.



DATE

THURS 17
MAY

TIME

12.00PM – 1.00PM

LOCATION

TRF BUILDING
LEVEL 2, SEMINAR
ROOMS 1 + 2