

Fellowship title	Improving detection and therapy in treatment-resistant cancers
Fellow	Dr Juliana Hamzah
Institution	Harry Perkins Institute of Medical Research
Research description	<p>This research program will potentially benefit patients suffering from treatment-resistant cancers such as triple negative breast cancer and liver cancers. Approximately one in eight Australian women will be diagnosed with breast cancer before the age of 85. Similarly, liver cancer is the third leading cause of death in Australia. Treatment options that include conventional chemotherapeutics are currently ineffective.</p> <p>Dr Hamzah has identified tumour stiffness as the major problem in breast and liver cancers. Tumour stiffness is caused by over-production of non-cellular matrix components that protects the tumour cells from being accessible to anti-cancer drugs. Consequently, the stiffer the tumour matrix, the more resistant it is to drug therapy.</p> <p>Recently this team has developed a new medication and treatment to specifically dissolve tumour stiffness. Degradation of matrix stiffness effectively exposes the tumour cells to anti-cancer medications. Dr Hamzah's goal is to explore the use of this drug to treat breast and liver cancers.</p>
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Supported	In the names of the Estate of Paulus Hoogendyk, Jackson McDonald & the Estate of Donald Weall