

A/Prof Yvonne Tay wins Young Scientist Award

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Singapore: Assistant Professor Yvonne Tay, principal investigator, Cancer Science Institute and President's Assistant Professor, Department of Biochemistry, National University of Singapore has received Young Scientist Award for her research on non-coding RNA networks in cancer.

Dr Tay's research focuses on the study of novel interactions between different classes of RNA, and how the dysregulation of these interactions can lead to cancer. Her work has led to important contributions in the understanding of the mechanisms of microRNA function.

She was amongst the first to demonstrate functional microRNA targeting in the coding regions of transcripts, significantly expanding the sphere of microRNA activity beyond the conventional 3'UTR-dependent model. Furthermore, Dr Tay's research has also led to the discovery that protein-coding transcripts can co-regulate the tumor suppressor PTEN by competing for shared microRNAs, thus acting as competing endogenous RNAs. Competing endogenous RNAs have since been shown to play critical roles in the pathogenesis of multiple cancers, and represent an additional layer of post-transcriptional regulation, which has profound implications for both basic cancer biology and potential therapeutic applications.

Dr Tay has seven publications in journals such as Nature and Cell, several of which have been recommended by the Faculty of 1000, and her works have been cited over 3700 times. She is a recipient of the Agency for Science, Technology and Research (A*STAR) Graduate Scholarship (2004), A*STAR Philip Yeo Prize for Outstanding Achievement in Research (2009), Leukemia & Lymphoma Society Special Fellowship (2011), Singapore National Research Foundation (NRF) Fellowship (2014), and NUS President's Assistant Professorship (2014).