

IN THE SPOTLIGHT

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UPCOMING EVENT

15 - 17 February
3.00pm - 8.00pm (GMT+8)

Epigenetics in Cancer Symposium 2021

Epigenetics in Cancer Symposium
15 - 17 February 2021

The Epigenetics in Cancer Symposium is a high-profile, three day conference with a lineup of well renowned, internationally distinguished speakers.

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NEWS & ACHIEVEMENTS



[Listen] Health Matters – RNA Editing to Suppress Cancer

Dr. Polly Chen shares her team's recent discovery of a previously unknown cancer formation mechanism on radio station CNA938's "Health Matters with Daniel Martin". In this interview, Dr. Chen explains how this new discovery could lead to more effective treatment of cancer.

[listen now >>>](#)

ZNF143 Mediates CTCF-Bound Promoter-Enhancer Loops Required for Murine Hematopoietic Stem and Progenitor Cell Function. (Nat Commun, Jan 2021)

Prof. Daniel Tenen and his team recently conducted a study which aims to investigate the function of a transcription factor known as zinc finger protein 143 (ZNF143) in the chromatin structure. By identifying and addressing existing research gaps, the team made inroads into understanding the regulatory mechanism of CTCF-DNA binding and demonstrated its strong association with ZNF143. Findings from this study will pave the way for the identification of novel strategies for patient characterization, early detection and therapeutic intervention for diseases including developmental disorders and cancers.



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Capitalizing on Synthetic Lethality of MYC to Treat Cancer in the Digital Age. (Trends Pharmacol Sci, Jan 2021)

While studies have identified MYC as the most frequent contributors to cancer, the development of targeted therapies against MYC remains a critical unmet need of cancer therapy. Recent studies have resorted to synthetic lethality as the next ideal treatment strategy for oncogene-addicted tumours. This interesting review led by A/Prof. Edward Chow highlights the most promising mechanisms of MYC synthetic lethality and looks into the clinical translation of these discoveries. Furthermore, the team explored the potential of in silico methodologies in identifying and targeting synthetic lethality targets of MYC in the age of artificial intelligence and big data.



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Short H2A Histone Variants are Expressed in Cancer. (Nat Commun, Jan 2021)

Dr. Chew Guo-Liang and his team found that short H2A (sH2A) histone variants innately possess features similar to recurrent oncohistone mutations associated with nucleosome instability. By studying existing cancer genomic datasets, the team discovered sH2A upregulation in a broad array of cancers, which manifest splicing patterns consistent with global nucleosome destabilization. The team established that short H2As are a class of "ready-made" oncohistones, whose inappropriate expression contributes to chromatin dysfunction in cancer.



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