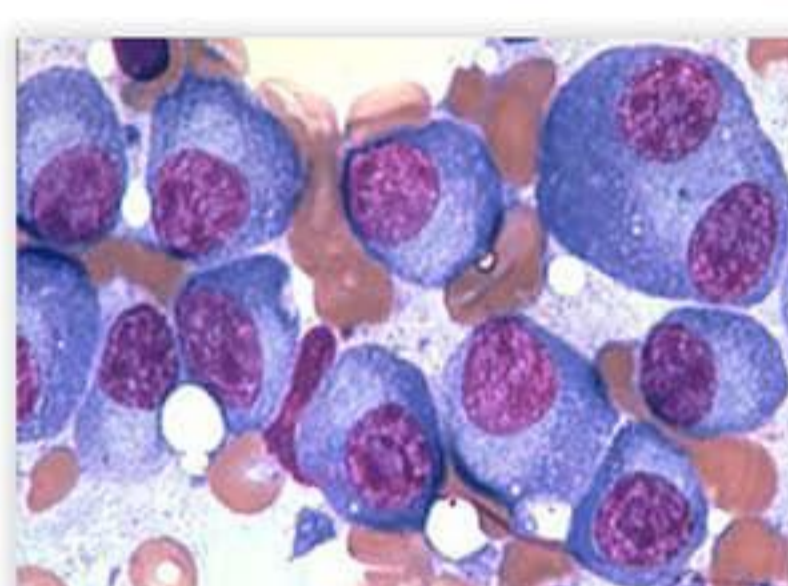


CANCER SCIENCE INSTITUTE OF SINGAPORE IN THE SPOTLIGHT

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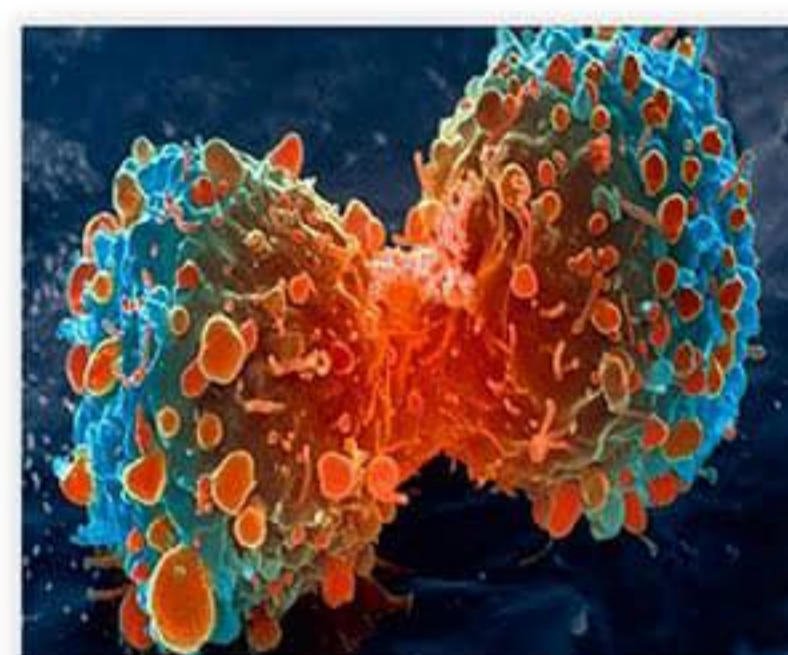
Mutational and Transcriptomic Profiling of Acute Leukemia of Ambiguous Lineage Reveals Obscure but Clinically Important Lineage Bias. (*Haematologica*, Dec 2018)

In a study on Acute Leukemia of Ambiguous Lineage (ALAL), Prof H. Phillip Koeffler and his group uncovered mutations of the disease by performing exome and transcriptome sequencing. Findings provide a deeper understanding of the mixed lineage phenotype of ALAL, contributing to the development of novel and effective therapeutic modality for this rare leukemic entity.



Metabolic Reprogramming of Oncogene-Addicted Cancer Cells to OXPHOS as a Mechanism of Drug Resistance. (*Redox Biol*, Dec 2018)

Researchers from Prof Goh Boon Cher's group characterized metabolic reprogramming as a mechanism of acquired resistance to targeted therapies. Study reveals enhanced reliance on mitochondrial oxidative phosphorylation (OXPHOS) in cancer cells. With the use of a novel mitochondrial complex I inhibitor, this metabolic vulnerability was successfully targeted, paving the way for clinical development of OXPHOS inhibitors.



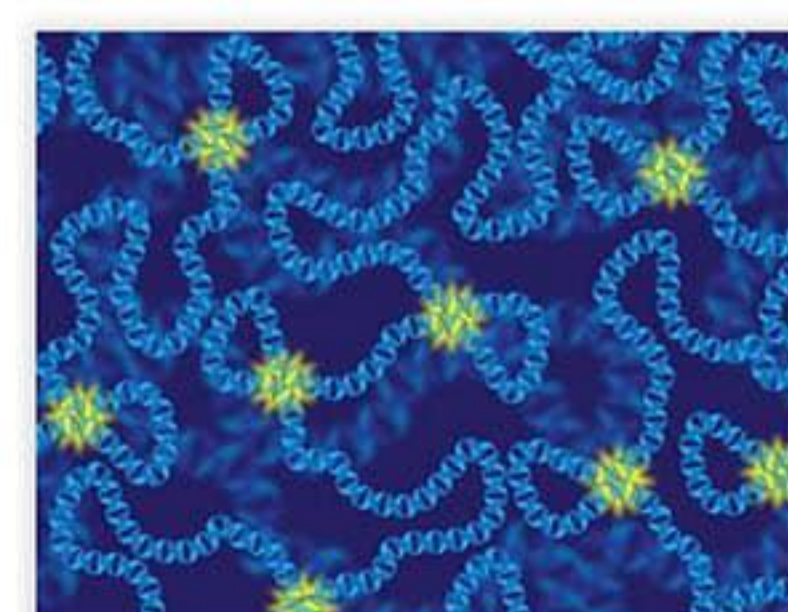
ROS and the DNA Damage Response in Cancer. (*Redox Biol*, Dec 2018)

Reactive Oxygen Species (ROS) is a group of short-lived, highly reactive and oxygen containing molecules. This review paper led by Dr Anand Jeyasekharan elaborated on the crucial roles of ROS and the mechanisms involved in bringing about DNA damage response. While additional pre-clinical research is necessary, the group also highlighted the clinical relevance of ROS in cancer.



Chromatin Interactions and Regulatory Elements in Cancer: From Bench to Bedside. (*Trends Genet*, Dec 2018)

In this outstanding review, Dr Melissa Fullwood and her team delved into the dysregulation of chromatin interactions and regulatory elements in cancer. As they discussed potential therapeutic strategies, they also raised insightful questions and identified possible challenges faced before the deployment of precision therapeutics.



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Enhanced Reliance on OXPHOS in Cancer Cells

ROS and the DNA Damage Response in Cancer

Chromatin Interactions and Regulatory Elements in Cancer: From Bench to Bedside

UPCOMING EVENTS

Distinguished Speakers' Series
Reuben Harris
18 Feb 2019

CSI Research Meeting
22 Feb 2019

RNA Biology Centre Meeting
26 Feb 2019

CSI Seminar
Peter Kharchenko
27 Feb 2019

SAVE THESE DATES!

**RNA BIOLOGY
SYMPOSIUM 2019**



3 - 4 OCT 2019

**FRONTIERS IN CANCER
SCIENCE 2019**



4 - 6 NOV 2019