

N2CR INSIGHTS

THE QUARTERLY NEWSLETTER OF N2CR

April – June 2022

ISSUE 3

LATEST NEWS

GRANTS AWARDED

ECI Internal Seed Grant Call Jan 2022

A/Prof Chen Ee Sin
Dr Asim Shabbir
Dr Constantinos Anastassiades

Joint NCIS-N2CR Seed Grant Feb 2022

Joint awardees:
A/Prof David Tan
A/Prof Glenn Bonney
Dr Anand Jeyasekharan

TREX Club May 2022 Call

A/Prof Chen Ee Sin, Prof Chng Wee Joo



A/Prof
Chen Ee Sin



Dr Asim
Shabbir



Dr Constantinos
Anastassiades



A/Prof
David Tan



A/Prof
Glenn Bonney



Dr Anand
Jeyasekharan

DISTINGUISHED SPEAKER SERIES

Friday 8 July 4 to 5 pm via zoom



PROF ROBERT BRISTOW

Professor, University of Manchester
Director, Manchester Cancer Research

Hypoxia, Multiomics and the Evolutionary Trajectory of Localised Prostate Cancer

This Issue

Latest news
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Research news
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Upcoming events

July 2022

TREX Club Solid
Tumor Grant Call
Meeting

August 2022

Precision Cancer
Medicine Seminar

September 2022

Early Cancer
Intervention Seminar

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N2CR – CLINICIAN SCIENTIST DEVELOPEMNT UNIT (CSDU) CAREER DEVELOPMENT PROGRAMME

Dr Sanjay de Mel

N2CR – CSDU FELLOW

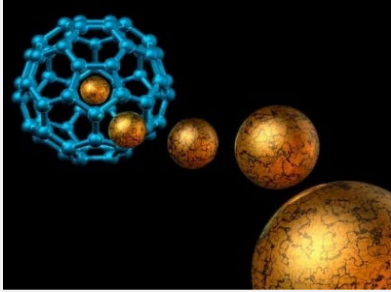


SHEN HAOQING Best Graduate Research Publication Award 2022

'ADARs act as potent regulators of circular transcriptome in cancer'
'Nature Communications, March 2022'
Thesis advisor: A/Prof Polly Chen



RESEARCH NEWS (Apr to Jun 2022)

Gold nanoparticles - An anticancer strategy for breast cancer patients

Incidence rate for breast cancer has been increasing in females globally. Immunotherapy has recently emerged as a promising anti-cancer strategy for prolonged survival in breast cancer patients. Recently, gold nanoparticles (AuNPs) have been shown to facilitate long-term therapeutic effects in breast cancer patients due to its good compatibility and resistance against degradation under physiological conditions. In this review, Prof Bay Boon Huat gives an overview of gold nanoparticles and their potential applications in breast cancer.

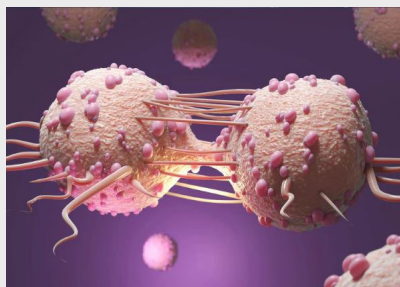
[Read more](#)

A new protein as a target for cancer treatment

The dynamic regulation of alternative splicing requires coordinated participation of multiple ribosomal binding proteins (RBPs). Aberrant splicing caused by dysregulation of splicing regulatory RBPs is implicated in numerous cancers. This research article published by Natures Communications and helmed by Associate Professor Polly Chen provides insights into the role of a cancer associated protein, DAP3, in cancer development. Findings in this research article suggests that DAP3 coordinates splicing regulatory networks to modulate global alternative splicing in cancer. Hence targeting/blocking DAP3-driven splicing events may hold great promise for cancer treatment.



[Read more](#)

New drug as potential therapeutic for Asian patients with advanced cancer

The drug Selinexor blocks specific protein that has been shown to be overexpressed in many types of cancer. Authors in this study, led by A/Prof David Tan, evaluated the tolerability and the safety of Selinexor in Asian patients with advanced malignancies. Findings identified the recommended dose of Selinexor that is well tolerated by Asian patients. This study proposes that the identified recommended dose can serve as the backbone for future Selinexor monotherapy and drug combination studies in biomarker selected cohorts that may contain a significant population of Asian patients.

[Read more](#)

Combined drug treatment for metastatic breast cancer

This clinical trial, helmed by Prof Lee Soo Chin with first author Dr Joline Lim, shows that the combination of drug Lenvatinib with Letrozole had manageable toxicity and preliminary antitumour activity in postmenopausal women with metastatic breast cancer. This indicates the combined therapy of drugs as potential treatment of postmenopausal women with metastatic breast cancer.

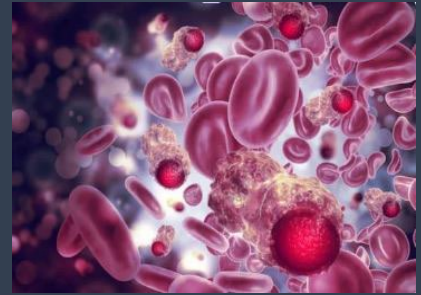
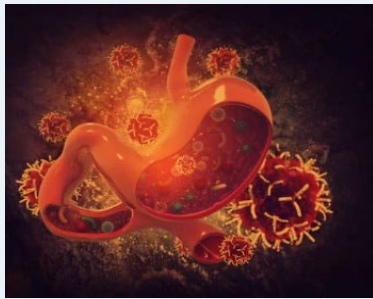
[Read more](#)



RESEARCH NEWS (Apr to Jun 2022)

Blood cancer drug may activate sleeping oncogene

Hypomethylating agents are currently used to treat patients with cancer. However, they can reactivate, and up-regulate oncogenes is not well understood. Prof Daniel Tenen and his team examined the effect of hypomethylating agents on oncogene *SALL4* that plays an important role in myelodysplastic syndrome and other cancers. By combining analysis of patient samples with CRISPR-DNMT1-interacting RNA technology, authors in this research article found that treatment with a hypomethylating agent indeed causes demethylation and up-regulation of an oncogene. Further studies are required to elucidate this mechanism, where a concomitant targeted therapy that directly or indirectly mitigates the oncogene expression, function, or both could be added to the treatment plan.


[Read more](#)
**A biomarker assay for assessment of gastric cancer**

Immune checkpoint inhibitors are now standard-of-care treatment for patients with advanced and metastatic gastric cancer. Biomarker expression such as programmed death ligand-1 (PD-L1) is routinely assessed via immunohistochemistry (IHC) to select gastric cancer patients for immunotherapy. Dr Raghav Sundar & Dr Yong Wei Peng in this study suggest caution in treating the various IHC assays as equivalent for the evaluation of biomarker for gastric cancer.

[Read more](#)
ADARs act as potent regulators of circular transcriptome in cancer

Circular RNAs (circRNAs) are produced by head-to-tail back-splicing which is mainly facilitated by base-pairing of their flanking introns. Read on to find out how ADARs (Adenosine deaminases acting on RNA) bind these double-stranded RNAs to **modulate circRNA biogenesis** and learn more about their regulatory presence across different types of cancer cells.

This article, which was recently published in Nature Communications, by first author Dr Shen Haoqing won Best Graduate Research Publication Award 2022.


[Read more](#)

ANNOUNCEMENTS



Graduate Programme
January 2023 Intake

**OPENING FOR APPLICATION
IN AUGUST**

For further enquiries email
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