

RMRC, Bhubaneswar

(Laxmi Narayan Memorial Library)

Weekly Current Awareness Service

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“I never made one of my discoveries through the process of rational thinking.”

— Albert Einstein

About Monday Morning

Monday morning is a weekly E- CAS (Electronic Current Awareness Service) of RMRC Library, Bhubaneswar which carries one Biomedical & health science news item and some useful current medical research links so that the scientists can access the articles. This E- Bulletin starts its journey from 21st Nov. 2016. In this maiden attempt we cordially invite your inputs and suggestions to improve in future.

Dr. Banamber Sahoo, Lib & Inf. Officer
Poonam Singh Deo & Hemanti Mahali (Lib. Trainee)

New molecule that can fight cancer

MEDICAL MARVEL

LONDON: Scientists have identified a new molecule that can rapidly kill tumour cells and could potentially be used to develop new cancer therapies.

Humans need the chemical element selenium for good health. The selenium-containing enzyme thioredoxin reductase 1 (TrxR1) can be used to support the growth of cells and to protect them from harmful forms of oxygen radicals that cause oxidative stress.

Selenium intake has long been connected with cancer, although the correlation between selenium and cancer growth is extremely complex and not fully understood. Raised levels of TrxR1 can be seen in several forms of cancer and are linked to worse prognoses in head and neck, lung and breast cancers.



Researchers analysed almost 4,00,000 molecules in the search for new and more specific TrxR1 inhibitors than those previously available. They discovered three molecules that met their search criteria. When tested, these same molecules also proved to be active as cancer medicines.

Researchers were able to treat over 60 types of cancer cells un-

der laboratory conditions. Normal cells were, however, much less sensitive to these molecules.

“This effectiveness against cancer may be a result of cancer cells’ seemingly greater sensitivity to oxidative stress when compared to normal cells, which in turn can be utilised in cancer therapy,” said Elias Arner, from Karolinska Institutet, Sweden.

1. Testing blood for troponin provides early indicator of heart disease risk

Norwegian researchers have developed a new blood test that they believe can accurately determine a person's risk of future heart disease. Scientists from the University of Oslo decided to test how an individual's levels of the protein troponin influence their risk of heart disease and whether this can be identified early enough for them to make changes to their lifestyle in order to reduce their cardiovascular disease risk. For more details click on the below link

http://www.mediplacements.com/article-801844611-testing_blood_for_troponin.html

2. Eating yogurt may reduce cardiovascular disease risk

A new study in the American Journal of Hypertension, published by Oxford University Press, suggests that higher yogurt intake is associated with lower cardiovascular disease risk among hypertensive men and women. High blood pressure is a major cardiovascular disease risk factor. Clinical trials have previously demonstrated beneficial effects of dairy consumption on cardiovascular health. Yogurt may independently be related to cardiovascular disease risk. For more details click on the below link

https://www.eurekalert.org/pub_releases/2018-02/oupu-eym021418.php

3. Synthetic biology: Reframing cell therapy for cancer

Engineering human cells to serve as living therapeutics represents a promising frontier in medicine. To date, most efforts and successes in this field have focused on reprogramming immune cells to recognize specific features on the surface of cancer cells, such that when these modified immune cells are introduced into a cancer patient, the therapeutic cells kill the cancer cells while sparing healthy tissues. For more details click on the below link

<https://www.nature.com/articles/nchembio.2573>

4. Here's How a Transgender Woman Breast-Fed for 6 Weeks

A transgender woman was able to produce enough milk to breast-feed her partner's newborn baby for six weeks, according to a new report of the case. The report is the first in the medical literature to formally document lactation in a transgender woman, the researchers said. For more details click on the below link

<https://www.livescience.com/61782-transgender-woman-breast-feeding.html>



E- CAS (Current Awareness Service)

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