

RMRC, Bhubaneswar

(Laxmi Narayan Memorial Library)
Weekly Current Awareness Service

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TH' FIRST THING TO HAVE IN A LIBRY IS A SHELF. FR'M TIME TO TIME THIS CAN BE DECORATED WITH LITHRACHURE. BUT TH' SHELF IS TH' MAIN THING.

~ FINLEY PETER DUNNE

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
Satyajit Nayak & Twinkle Rout (Lib. Trainee)

Chemicals in shampoos, alcohol may up cancer risk

University of Cambridge says that Aldehydes, a class of substances made in our own bodies but found everywhere in our environment, is the reason

WATCH OUT

LONDON: Common chemicals found in everyday items such as furniture, cosmetics, shampoos and alcohol can increase the risk of cancer, a new study warns.

Aldehydes are a class of chemicals made in our own bodies in small quantities but found everywhere in our environment. Exposure to these chemicals has previously been linked with cancer, but the reasons for the link remain unclear.

Researchers from the University of Cambridge, used genetically-engineered human cells and cells from patients bearing a faulty copy of the breast cancer gene BRCA2 to identify the mechanism by which exposure to aldehydes could promote cancer.

Damage to our DNA, which

arises frequently as cells in our bodies divide, can lead to the development of cancers, but our body has its own defence mechanism that helps repair this damage. However, researchers found that aldehyde exposure breaks down this defence mechanisms even in normal healthy cells, but people who have inherited a faulty copy of BRCA2 are particularly sensitive to such damage.

Everyone is born with two copies of most genes.

People who inherit a single faulty copy of the BRCA2 gene are susceptible to cancer. The reason behind this is not fully understood, because their cells should be able to repair DNA using the lower — but still adequate — levels of BRCA2 protein made from the remaining, intact copy of the gene.

New study shows that aldehydes trigger the degradation of BRCA2 protein in cells. In people who inherit one faulty copy of the BRCA2 gene, this effect pushes down BRCA2 protein levels below the amount required for adequate DNA repair, breaking down the normal mechanisms that prevent mutations, which could promote cancer formation.



1. Potential building block of life found in very young star system.

Two teams of researchers report today that they have detected a prebiotic molecule—a potential building block of life—around newly formed sunlike stars. The molecule, methyl isocyanate, has a structure that is chemically similar to a peptide bond, which is what holds amino acids together in proteins. The finding suggests that quite complex organic molecules may be created very early in the evolution of star systems. For more details click on the below link.

<http://www.sciencemag.org/news/2017/06/potential-building-block-life-found-very-young-star-system>

2. Oldest *Homo sapiens* fossil claim rewrites our species' history.

Researchers say that they have found the oldest *Homo sapiens* remains on record in an improbable place: Morocco. At an archaeological site near the Atlantic coast, finds of skull, face and jaw bones identified as being from early members of our species have been dated to about 315,000 years ago. That indicates *H. sapiens* appeared more than 100,000 years earlier than thought: most researchers have placed the origins of our species in East Africa about 200,000 years ago. For more details click on the below link.

<http://www.nature.com/news/oldest-homo-sapiens-fossil-claim-rewrites-our-species-history-1.22114>

3. Infants born preterm may lack key lung cells later in life.

Mice born into an oxygen-rich environment respond worse to the flu once fully grown due to an absence of certain lung cells, a discovery that provides a potential explanation for preterm infants' added susceptibility to influenza and other lung diseases later in their lives, according to new research from the University of Rochester Medical Center (URMC). For more details click on the below link.

https://www.eurekalert.org/pub_releases/2017-06/uorm-ibp060717.php

4. WHO Weekly epidemiological record.

The International Health Regulations (IHR) – 10 years of global public health security. For more details click on the below link.

<http://apps.who.int/iris/bitstream/10665/255639/1/WER9223.pdf?ua=1>



E- CAS (Current Awareness Service)

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