

RMRC, Bhubaneswar

(Laxmi Narayan Memorial Library)

Weekly Current Awareness Service

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“Libraries store the energy that fuels the imagination. They open up windows to the world and inspire us to explore and achieve, and contribute to improving our quality of life.”

--Sidney Sheldon

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)

Link between drugs, immune system failure found

According to researchers, some substances found in body can prevent Mucosal Associated Invariant T cells from detecting infections



TWO-FACED PILLS

SYDNEY: Australian researchers are a step closer to understanding immune complications caused by commonly prescribed medications, the media reported. Many well-known and commonly prescribed drugs that are successfully used to treat diseases can also have harmful side effects. While it has been known that some drugs can inhibit the immune system, why it occurs has remained a mystery, Xinhua news agency reported.

Research published by Monash University and the University of Melbourne on Tuesday has taken the most significant step yet in understanding the process that inhibits the immune system. The research team investigated Mu-

cosal Associated Invariant T (MAIT) cells, a specialised type of immune cells, to discover what type of drugs were activating the MAIT cells.

They found that some drugs prevented the MAIT cells from performing their main function of detecting infections while others activated the immune system. Andrew Keller, lead author of the study which was published in *Nature Immunology*, said the research should lead to a much better understanding of immune reactions by some people to certain drugs. Keller said that the T cells were an integral part of the body's immune system. "They protect the body by 'checking' other cells for signs of infection and activating the immune system when they detect an invader," Keller said in a statement.

<http://epaper.newindianexpress.com/c/16757062>

1. **Scientists turn food poisoning microbe into powerful cancer fighter.**

Cancer tends to stick around because it's practically invisible to the body's own defenses: The immune system doesn't recognize the rogue cells because they aren't foreign invaders. To activate the immune system to attack cancer, scientists have tried all sorts of tricks, including infecting cancerous tissue with bacteria. Now, scientists have modified *Salmonella* bacteria to trigger a particularly powerful immune response against human cancer cells implanted in mice, shrinking the tumors and—for the first time—preventing them from metastasizing. If the technique can be replicated in humans, it would be a significant step forward for the field of bacterial cancer therapy. For more details click on the below link.

<http://www.sciencemag.org/news/2017/02/scientists-turn-food-poisoning-microbe-powerful-cancer-fighter>

2. **A quarter-dose quadpill for initial treatment of hypertension.**

The immediate goal of antihypertensive therapy is the prompt achievement of target blood pressure without adverse effects on quality of life. The efficacy, tolerability, and safety of available pharmacological agents makes attainment of these goals possible in most patients. Nevertheless, undertreatment of hypertension results in the continued occurrence of many preventable and potentially negative outcomes for patients worldwide. For more details click on the below link.

[http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(17\)30331-8.pdf](http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(17)30331-8.pdf)

3. **Scientists identify aggressive pancreatic cancer cells and their vulnerability.**

HOUSTON - Researchers have identified a gatekeeper protein that prevents pancreatic cancer cells from transitioning into a particularly aggressive cell type and also found therapies capable of thwarting those cells when the gatekeeper is depleted. For more details click on the below link.

https://www.eurekalert.org/pub_releases/2017-02/uotm-sia020917.php

4. **Scientists have discovered an 'off' switch for the revolutionary CRISPR gene editing tool.**

A lot has been written about [CRISPR](#) over the past year. The powerful gene editing tool can quickly and easily 'cut and paste' genes, which means scientists might be able to use it to edit disease out of human cells, and even prevent [genetic disorders in the first place](#). In November, [CRISPR was trialled for the first time](#) on human lung cancer patients. For more details click on the below link.

<http://www.sciencealert.com/scientists-have-discovered-an-off-switch-for-the-revolutionary-crispr-gene-editing-tool>

5. **WHO Weekly epidemiological record.**

Tetanus vaccines: WHO position paper – February 2017. For more details click on the below link.

<http://apps.who.int/iris/bitstream/10665/254582/1/WER9206.pdf?ua=1>



E- CAS (Current Awareness Service)

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