

RMRC, Bhubaneswar

(Laxmi Narayan Memorial Library)

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A LIBRARY IS A PLACE THAT IS A REPOSITORY OF INFORMATION AND GIVES EVERY CITIZEN EQUAL ACCESS TO IT. THAT INCLUDES HEALTH INFORMATION, AND MENTAL HEALTH INFORMATION. IT'S A COMMUNITY SPACE. IT'S A PLACE OF SAFETY, A HAVEN FROM THE WORLD.

NEIL GAIMAN

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)

Long-term use of antibiotics linked to high cancer risk

According to research, diversity of bugs in the gut could play a role in development of bowel tumours



There is increasing evidence that our microbiota are important in regulating our immune responses and many aspects of normal function. Anything that disturbs our gut bacteria — such as diet, inflammation or antibiotic use — may have an impact on our health.

Sheena Cruickshank, lecturer in immunology at the University of Manchester



PARIS: Long-term use of antibiotics increases the risk later in life of developing colon polyps, often a precursor of bowel cancer, researchers said on Wednesday. The findings, published in the journal *Gut*, boost evidence that the digestive tract's complex network of bacteria may play a key role in cancer emergence.

Earlier, research has linked antibiotic use to developing bowel cancer but the potential association with these abnormal growths had not been explored. To find out more, Andrew Chan of Massachusetts General Hospital combed through health records of 16,642 women who were 60 or older in 2004. The women were enrolled in the Nurses Health Study, which has been following the health of 121,700 nurses in the United States since 1976. The nurses' medications are included in the monitoring. The women examined in the new study had at least one colonoscopy between 2004 and 2010.

During that period, 1,195 cases of polyps were diagnosed. Researchers found an increased risk of polyps among women who had taken antibiotics for a total of two months or more over two-decade span. Women who did so in their 20s and 30s had a 36-percent greater chance of polyps forming compared to counterparts who did not extensively use antibiotics.

1. Giant viruses found in Austrian sewage fuel debate over potential fourth domain of life.

Tourists visiting the town of Klosterneuburg in eastern Austria often head for the 12th century monastery or the nearby memorial to author Franz Kafka. Virologists and evolutionary biologists, however, may one day pay homage to the town's sewage treatment plant, which has yielded a genome that appears to be from the most cell-like viruses yet. For more details click on the below link.

<http://www.sciencemag.org/news/2017/04/giant-viruses-found-austrian-sewage-fuel-debate-over-potential-fourth-domain-life>

2. Turning skin cells into blood vessel cells while keeping them young.

Researchers from the University of Illinois at Chicago have identified a molecular switch that converts skin cells into cells that make up blood vessels, which could ultimately be used to repair damaged vessels in patients with heart disease or to engineer new vasculature in the lab. The technique, which boosts levels of an enzyme that keeps cells young, may also circumvent the usual aging that cells undergo during the culturing process. Their findings are reported in the journal *Circulation*. For more details click on the below link.

https://www.eurekalert.org/pub_releases/2017-04/uoiat-tsc040617.php

3. CRISPR studies muddy results of older gene research.

Jason Sheltzer, a cancer biologist at Cold Spring Harbor Laboratory in New York, was on the hunt for genes involved in tumour growth. He and his colleagues planned to disable genes using the popular gene-editing tool CRISPR–Cas9, then look for changes that reduced the rate at which cancer cells multiply. But they needed a control gene that would yield that same effect. For more details click on the below link.

<http://www.nature.com/news/crispr-studies-muddy-results-of-older-gene-research-1.21763>

4. WHO Weekly epidemiological record.

Surveillance systems to track progress towards polio eradication worldwide, 2015–2016. For more details click on the below link.

<http://apps.who.int/iris/bitstream/10665/254988/1/WER9214.pdf?ua=1>



E- CAS (Current Awareness Service)

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