

RMRC, Bhubaneswar

(Laxmi Narayan Memorial Library)

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ONE BEST BOOK IS EQUAL TO HUNDRED GOOD FRIENDS BUT ONE GOOD FRIEND IS EQUAL TO A LIBRARY.

– DR. A.P.J ABDUL KALAM

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)

NEANDERTHAL DNA INFLUENCES HEIGHT, SCHIZOPHRENIA RISK



RNA

Ribonucleic acid (RNA) is a polymeric molecule essential in various biological roles in coding, decoding, regulation and expression of genes.

NEW YORK: Although the last Neanderthal died tens of thousands years ago, their DNA sequences still influence how genes are turned on or off in modern humans, and their effects can contribute to traits such as height and susceptibility to schizophrenia or lupus, says a study. Experts know that after leaving Africa, our ancestors — the homo sapiens — mated with Neanderthals thousands of years ago, and today Neanderthal DNA makes up one to four per cent of the genomes of modern non-African people.

“Even 50,000 years after the last human-Neanderthal mating, we can still see measurable impacts on gene expression,” said study co-author Joshua Akey from the University of Washington School of Medicine in Seattle. “And

those variations in gene expression contribute to human phenotypic variation and disease susceptibility,” Akey added. Previous studies have found correlations between Neanderthal genes and traits such as fat metabolism, depression, and lupus risk. In this study, published in the journal Cell, researchers analysed RNA sequences in a dataset called the Genotype-Tissue Expression (GTEx) Project, looking for people who carried both Neanderthal and modern human versions of any given gene — one version from each parent.

For each such gene, the investigators then compared expression of the two alleles head-to-head in 52 different tissues. “We find that for about 25 per cent of all those sites that we tested, we can detect

a difference in expression between the Neanderthal allele and the modern human allele,” added Rajiv McCoy, post-doctoral researcher at the University of Washington.

One example uncovered by this study is a Neanderthal allele of a gene called ADAMTSL3 that decreases risk of schizophrenia, while also influencing height. “Hybridisation between modern humans and Neanderthals increased genomic complexity,” Akey explained. “Hybridisation wasn’t just something that happened 50,000 years ago that we don’t have to worry about anymore. Those little bits and pieces, our Neanderthal relics, are influencing gene expression in pervasive and important ways,” Akey said.

1 Pipe-climbing bacteria might spread infection from hospital sinks.

Bacteria can thrive in p-traps, those “U bends” below sink drains that collect everything from errant earrings to lost toothpaste tube caps. That’s a big problem, especially in hospitals where sinks have been linked to a slew of bacterial outbreaks. To determine exactly how the pathogens spread, scientists built a row of five sinks in a setup similar to that in many hospitals, with all of them draining into the same pipe. For more details Click on the below link.

<http://www.sciencemag.org/news/2017/03/pipe-climbing-bacteria-might-spread-infection-hospital-sinks>

2 Amazon rainforest was shaped by an ancient hunger for fruits and nuts.

The Amazon has long been held up as an example of untamed wilderness. But people have lived in the world’s largest rainforest for thousands of years, hunting, gathering and farming¹. For years, researchers have debated how much of an influence human activities have had on the Amazon. And now, a study describes the extent to which ancient peoples changed the distribution of trees in the forest around them. For more details click on the below links.

<http://www.nature.com/news/amazon-rainforest-was-shaped-by-an-ancient-hunger-for-fruits-and-nuts-1.21576>

3 Scientometrics Pioneer Eugene Garfield Dies.

“He was an amazing character whose influence on information science, writ large, can’t be underestimated,” H. Carton Rogers III, vice provost and director of libraries at the University of Pennsylvania, where Garfield served as a member of the Libraries’ Board of Overseers, said in a statement emailed to *The Scientist*. “He will be greatly missed.” For more details click on the below link.

<http://www.the-scientist.com/?articles.view/articleNo/48636/title/Scientometrics-Pioneer-Eugene-Garfield-Dies/>

4 'Red hair' gene variant may underlie association between melanoma and Parkinson's disease.

A gene variant that produces red hair and fair skin in humans and in mice, which increases the risk of the dangerous skin cancer melanoma, may also contribute to the known association between melanoma and Parkinson's disease. For more details click on the below link.

https://www.eurekalert.org/pub_releases/2017-03/mgh-hg030217.php

5 WHO Weekly epidemiological record.

Roadmap to elimination standard measles and rubella surveillance. For more details click on the below link.

<http://apps.who.int/iris/bitstream/10665/254652/1/WER9209-10.pdf?ua=1>



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