

सावित्रीबाई फुले पुणे विद्यापीठ
(पूर्वीचे पुणे विद्यापीठ)
SAVITRIBAI PHULE PUNE UNIVERSITY
(Formerly University of Pune)

समन्वय कक्ष (माध्यम)
गणेशखिंड, पुणे



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Scientists from Savitribai Phule Pune University Successfully decode Secretes of Human Genome

- May help in treatment of diseases like AIDS, some Cancers

Pune -

Scientists from Savitribai Phule Pune University and other research institutes in Pune got success in preparing the whole genome map of human 'Scaffold/Matrix Attachment Regions (S/MARs)' that are instrumental in three dimensional packaging of Human DNA. They also established its link with retrovirus stable infections in human which are responsible for diseases like AIDS and some type of Cancers. This work is first of its kind in the world.

Dr. Abhijeet Kulkarni of Bioinformatics Centre at Savitribai Phule Pune University along with Dr. Smriti Mittal (Department of Biotechnology at SPPU), Dr. Samit Chattopadhyay (NCCS, Pune and IICB, Kolkata) and their students Nitin Narwade, Sonal Patel, Aftab Alam are the names of investigators. This work has been acknowledgement from International Scientific community as the article is published in prestigious 'Nucleic Acids Research Journal' of Oxford University Press in its June 2019 issue.

What is research?

Through biological data mining, the investigators first prepared the whole-genome map of human S/MARs. Later they studied data of around 12 lakh samples that were infected with HIV and HTLV retroviruses. Their analysis reveals preferential integration of these viruses around S/MAR elements in human genome.

How this is helpful?

- This work will be helpful to design better antiviral therapeutic strategies to treat

retroviral diseases like AIDS and cancers.

- It will also help us to better understand human genome functioning.
- Bioinformatics and Biotechnology is helping us in a great way to address complex biological questions and we will be able to see revolution in biomedical research with use of Artificial Intelligence, Machine learning and Big data mining.

The lead writer Dr. Kulkarni said.

Significance of ‘Nucleic Acids Research Journal’

This journal is very prestigious and reputed on in scientific community. Its impact factor is 11.15. That is considered as quite good in scientific community. That proves importance of this research.

अभिजित घोरपडे

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