

National Science Day Public Lecture

Lessons of time keeping from fly

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One of the essential and spectacular displays of life on earth is *time keeping*. From practicing the 24 hr rhythm to determining the average life-span, living beings stick to their timing. The work of Jeffrey C. Hall, Michael Rosbash and Michael W. Young that explains the molecular mechanism of this time keeping process using fruit-fly as the model system. Their findings explain how plants, animals and humans adapt their biological rhythm so that it is synchronized with the Earth's revolutions. This work was recognized by the 2017 Nobel Prize in Physiology or Medicine. This story also demonstrates that simple and convenient model system like fruit-fly can be used to investigate the general principles and mechanisms of life processes. Such systems can therefore, help us understand human diseases and potential remedies.

Wednesday, February 28, 2018 at 5.15 p.m.
Homi Bhabha Auditorium
Tata Institute of Fundamental Research
Colaba, Mumbai 400005

Dr. Mishra received his Ph.D. in Organic Chemistry in 1986 from University of Allahabad and started his career in biology by studying DNA structure at Molecular Biophysics Unit of the Indian Institute of Science, Bangalore, and, subsequently, effect of such structures on the regulatory functions at the Centre for Cellular and Molecular Biology, Hyderabad. He explored small antisense DNA approach to control of protozoan parasites at the University of Bordeaux, France, and use of such tools to understand the mechanism of RNA processing in frog eggs at Saint Louis University, Missouri, USA. He has also held a position at the University of Geneva, Switzerland. He is currently the Director of CCMB.

He is a Fellow of the Indian Academy of Sciences, the National Academy of Sciences, the Indian National Science Academy. Dr Mishra is currently a J C Bose National Fellow of the Department of Science and Technology.

Lecture is open to all

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