



# PUNE KNOWLEDGE CLUSTER & INDIAN ACADEMY OF SCIENCES PRESENT INDIA S&T @ 75 LECTURE SERIES

# Title: Nature & Nurture: How the Environment Shapes our Genes

Organized By	Pune Knowledge Cluster (PKC)
Date	13th Nov 2021
Time	11:00 AM - 12: 30 PM
Abstract	The past decade has witnessed the explosion of information in biomedical sciences due to the availability of genome sequences and the development of techniques that assay 'epigenetic' modifications. These modifications highlight how the dynamic changes in the environment ultimately affect the expression of genes on a day-to-day basis and throughout a lifetime. As a result, we pass on much more information than that encoded by our genes to the next generation. Hence, having settled the long-standing nature versus nurture debate, we now appreciate that nature and nurture together make us what we are. I will illustrate the technological breakthroughs and trans-disciplinary approaches that have enabled a deeper understanding of disease susceptibility, especially focusing on lifestyle disorders.
Open to all	It's public talk. Open to all
Potential Gains	As a part of the "India S&T @75" events during the countdown to the 75th year of India's independence, the Pune Knowledge Cluster will be organising a number of lectures on scientific topics. These lectures will be delivered by Fellows and Associates of the Indian Academy of Sciences, who are based in Pune, and will be organised in association with the Academy. The lectures will cover a wide variety of topics, ranging from cutting edge science and technology to developments in these areas in the country over the 75 years since independence.
Speaker	Prof. Sanjeev Galande, Fellow, Indian Academy of Sciences





## **Profiles of Speaker**

#### Brief information about the speaker



Dr. Galande obtained his PhD in Biochemistry from the Indian Institute of Science in 1996. As a postdoctoral fellow at the Lawrence Berkeley National Laboratory, the USA from 1996-2001, he studied cancer biology. Dr. Galande joined the National Centre for Cell Science in Pune, India in 2001 as a senior scientist. In 2010 Dr. Galande joined as a Professor at the Indian Institute of Science Education and Research (IISER Pune). Research in Galande laboratory is focused on studying how the dynamic changes in higher-order chromatin assembly govern gene expression spatially and temporally. At IISER he leads the Centre of Excellence in Epigenetics (CoEE) and has assembled a team of scientists to study the evolution of epigenetic mechanisms using multiple model systems. Dr. Galande was a recipient of the International Senior Research Fellowship from the Wellcome Trust, UK, from 2005-2010, the National Bioscience award in 2006, the Swarnajayanti Fellowship in 2007, the Shantiswaroop Bhatnagar Award in 2010, the GD Birla Award for Scientific Excellence in 2015, and the JC Bose Fellowship in 2019. Dr. Galande is an elected fellow of the Indian Academy of Sciences, the Indian National Science Academy, and the National Academy of Sciences (NASI). Prof. Galande was an honorary associate faculty at the University of Sydney, Australia and a visiting faculty at the University of Turku, Finland. He also served as the Dean, Research and Development at IISER-Pune. In June 2021, he joined as the Dean of the School of Natural Sciences at Shiv Nadar University, Delhi NCR. Currently, Dr. Galande is establishing a new Centre for Integrative and Translational Research at this university. Lab webpage: www.sglabepigenetics.com.

### **About the Organizer**



The Pune Knowledge Cluster (PKC) has been established by the Office of the Principal Scientific Adviser to the Government of India. It aims is to bring together academia, R&D institutions, and the industry of Pune and its surrounding areas, to address the challenging problems of the region through innovative means, using scientific knowledge and engaging highly skilled human resources.

PKC is administered by the Inter-University Centre for Astronomy and Astrophysics (IUCAA). In the initial phase, PKC would focus on Health, Sustainability and Environment, Sustainable Mobility, BIG Data and AI and Capacity Building

For more information, visit: <a href="https://www.pkc.org.in/">https://www.pkc.org.in/</a>