



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

STATISTICAL SEARCH FOR A GENETIC CONNECTION **BETWEEN TOBACCO & ORAL CANCER**

Discovery of BRCA 1 and 2 genes which make a female prone to breast cancer is a well-known story. Angelina Jolie, a Hollywood superstar, made it to the cover of Time magazine because of it. Dr. Dhananjaya Saranath, an expert on cancer genetics, based in Mumbai, has devoted an enormous amount of effort and resources to generate data hoping for a similar discovery in the case of oral cancer among Indians who chew tobacco. She gathered data on 1000 habitual tobacco chewers (half suffering from oral cancer and the other half free from it) and examined a set of genes which according to her intuition, are likely candidates for genes responsible for oral cancer. The basic idea is to contrast oral cancer positive and negative groups in terms of their genetics.

The lecture describes various steps in statistical analysis of these data leading to a strong suggestion that a single gene or possibly a small group of genes may be responsible for oral cancer. Methods of analysis are elementary.

19th June 2021 | 11.00 am

Prof. Anil Gore Fellow, Indian Academy of Scie







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.