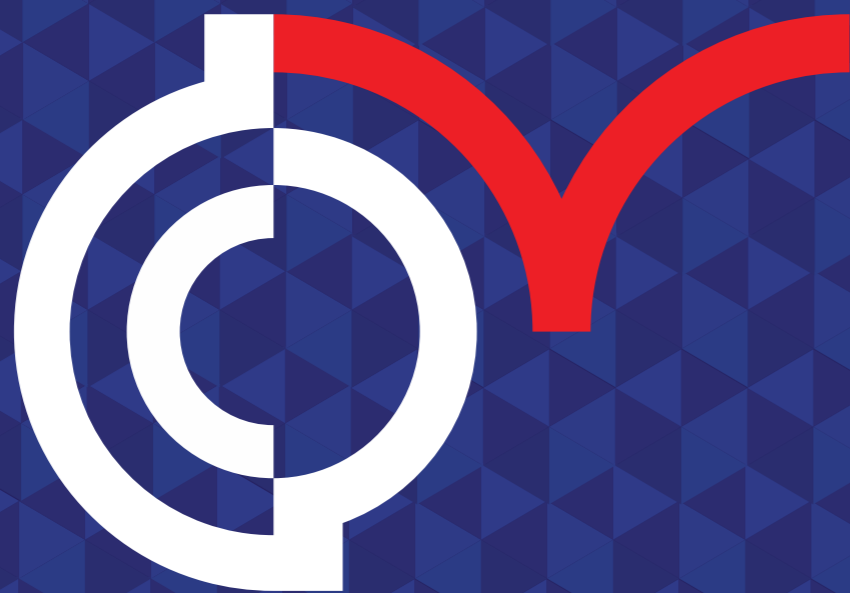


29<sup>TH</sup>  
CPDM DISTINGUISHED LECTURE ON

# ADVANCED DESIGN AND MANUFACTURING



Centre for Product Design and Manufacturing

Venue: MMCR, CPDM  
2nd March, 2023 | 16:00-17:30



Indian Institute of Science  
Bangalore

Using molecular and digital technologies with artificial intelligence to unravel the causes of premature heart disease and diabetes among Indians



**Dr. SANJAY KINRA**

Professor & Head,  
Department of Non-Communicable Disease Epidemiology,  
London School of Hygiene & Tropical Medicine, UK

### Abstract:

Indians get heart disease and diabetes at younger ages, the reasons for which are unclear. A number of hypotheses related to genetics (or epigenetics), undernutrition in pregnancy and childhood, deficiencies of several vitamins, gut infections and pollution have been postulated. Dr. Sanjay Kinra's research, based in a longstanding cohort study in Telangana (APCAPs; <https://apcaps.lshtm.ac.uk>), hopes to unravel this mystery by combining the latest advances in molecular and digital technologies with artificial intelligence.

### Bio :

Dr. Sanjay Kinra is a Professor of Clinical Epidemiology and the Head of Department of Non-Communicable Disease Epidemiology at the London School of Hygiene & Tropical Medicine. His research interests are in understanding the causes of premature diabetes and heart disease in India and to use those for developing low-cost solutions for their prevention and treatment. He directs a longstanding cohort study in Telangana (APCAPs; <https://apcaps.lshtm.ac.uk>), which is investigating the social and biological causes of chronic diseases such as heart disease, diabetes, and dementia. He has conducted several clinical trials of culturally tailored interventions for self-management of chronic conditions involving the use of less skilled workers, traditional therapies (yoga, Ayurveda), and digital technologies. He is passionate about leveraging digital technologies and artificial intelligence for improving the health of disadvantaged populations.

