

**Education:**

PhD in Statistics, Indian Statistical Institute, 2003

Thesis Title: Some statistical contributions to the analysis of human genome diversity and evolution

Master of Statistics (Applied Statistics and Data Analysis), Indian Statistical Institute, 1998

**Past Appointments**

Assistant Professor, November 2012 to April 2016, National Institute of BioMedical Genomics, India

DBT-NIBMG Fellow, September 2009 to November 2012, National Institute of BioMedical Genomics, India

Post Doctoral Employee, January 2005 to July 2009, University of California San Francisco, California, USA

Post Doctoral Scholar, July 2004 to December 2004, Stanford University, California, USA

**Awards & Honours**

Fellow of the West Bengal Association of Science and Technology, December 2016

Young Investigator Award at the 12th International Congress of Human Genetics/ 61st American Society of Human Genetics Meeting, Montreal 2011

Honorable Mention in USPROC 2011 Competition (Project with Sayar Karmakar and Dr Anil K Ghosh)

**Orations & Special Lectures.**

April 2019: EMBO | EMBL Symposium: Reconstructing the Human Past - Using Ancient and Modern Genomics at EMBL Heidelberg, Germany

Title of talk: "Population diversity of Austroasiatic speakers: Complex substructure and intricate layered network of dispersal" (invited flash-talk)

October 2018: 2018 NextGen Genomics & Bioinformatics Technologies (NGBT) Conference

Title of talk: "Reconstructing the ancestral footfall in South and Southeast Asia" (invited lecture)

September 2018: Discussion Meeting "Human Diversity and Ancestry in India", JNCASR, Bangalore

Title of talk: "Reconstruction of ancestral footfalls in South and South East Asia using genomic data." (Invited lecture, Discussion Leader – 'Genetics Modern DNA')

November 2017: Symposium in honour of Prasanta Chandra Mahalanobis in the 125th anniversary year of his birth", Indian Statistical Institute, Kolkata

Title of talk: "Mahalanobis D2 and Later Developments in Understanding Population Relationships & Structure"(invited lecture)

September 2017: The Sydney Brenner Institute for Molecular Bioscience, University of Witwatersrand, Johannesburg, South Africa

Title of talk: "The Eastward Ho and other stories: How Africa and India are connected closer than you think" (invited lecture)

June 2017: "Student Outreach Program-Excitement in Science", IISER-Mohali

Title of talk: "Genomic Reconstruction of our ancestral Footprints" (invited lecture)

March 2017: "GAL Workshop Human evolution in Eurasia elucidated through Genetics, Archeology, and Linguistics." National Institute of Genetics, Mishima, Japan

Title of talk: "Genomic reconstruction of the history of extant populations of India reveals multiple ancestral components and a complex structure in South East Asia" (invited lecture)

March 2017: 42nd Annual Meeting of Indian Society of Human Genetics (ISHG), Indian Institute of Science (IISc), Bangalore

Title of talk: "Should India have a Genome Project of its own?" (invited lecture)

March 2017: "UGC SAP (DRS - I) National Seminar on Perspectives in Bio-cultural Anthropology: Issues and Challenges" Department of Anthropology, Vidyasagar University

Title of talk: "Reconstructing Our Ancestral Footprints from Genomic data" (invited lecture)

February 2017: Genomic Analysis and Technology Conference (GATC)

Title of talk: "Why do we need an Indian Genome Project?" (invited lecture)

February 2017: Fourth Foundation of Biology Meeting at Orange County, Coorg

Title of talk: "Genomic Reconstruction of our ancestral Footprints" (invited lecture)

## Current Projects

GenomeIndia: Cataloguing the genetic Variation in Indians (Department of BioTechnology, Government of India)

Integrating Multi-Omics Data Using Big Data Analytics to Infer Optimal Wellness Trajectories for Management of Non-communicable diseases (NCDs): Cervical Cancer as an Exemplar

(Department of BioTechnology, Government of India)

Development of a fast, flexible, high performance computing framework to accelerate NGS omics-data analysis (National Supercomputing Mission (NSM) Platform for Genomics and Drug Discovery, Government of India)

Unbiased Profiling of Loci Relevant for Pharmacogenomics, Pharmacovigilance and Predisposition to Some Common Disorders in a Peri-Urban Population of West Bengal

(Department of BioTechnology, Government of West Bengal)

A Unified Web-portal for Analysis, Integration and Visualization of Multi-omics Data

(Department of BioTechnology, Government of India)

#### Past Major Projects

ADVANCE (Atherosclerotic Disease, Vascular function, and genetic Epidemiology) is a multicenter (Stanford University, Kaiser Permanente, UCSF) Study aimed at providing better care for patients with atherosclerotic coronary heart disease through the application of modern genetic approaches. (<http://med.stanford.edu/advance/>)

Family Blood Pressure Program (FBPP) is a large multi-center genetic study of high blood pressure and related conditions in multiple ethnic groups. The program in turn consists of four multi-center Networks: GenNet, GENOA, HyperGEN and SAPPHiRe. (<http://www.biostat.wustl.edu/fbpp/FBPP.shtml>)