

# Atanu Bhattacharjee

# Curriculum Vitae

# Education

2008–2012 **Ph.D in Statistics**, *Gauhati University*, Guwahati.

Title Bayesian analysis for longitudinal data on type 2 diabetes patients

Supervisor Professor Dilip C Nath

2006–2008 M.Sc in Statistics, Banaras Hindu University, Varanasi.

# Experience

2017-Present Assistant Professor, Centre for Cancer Epidemiology, Tata Memorial Centre, Mumbai

2016-2017 Senior Biostatistician, Chiltren Clinical Research Ltd, Bangalore

2013-2016 Assistant Professor, Malabar Cancer Centre, Thalassery

# Publications in Decision Science journals (10 best papers)

2021 Bayesian effective biological dose determination in immunotherapy response trial. *Annals of Data Science*, 1-15.

A weight function method for selection of proteins to predict an outcome using protein expression data. *Journal of Computational and Applied Mathematics*, 391,113465.

Joint modeling of longitudinal and time-to-event data on multivariate protein biomarkers. *Journal of Computational and Applied Mathematics*, 381, 113016.

Bayesian competing risk analysis: an application to nasopharyngeal carcinoma patients data. Computational and Systems Oncology, 1(1), e1006.

2020 Classification algorithm for high-dimensional protein markers in time-course data. *Statistics in Medicine*, 39(28), 4201-4217.

Estimation of treatment effect with missing observations for three arms and three periods crossover clinical trials. *Annals of Data Science*, 7(3), 447-460.

Disease progression of cancer patients during COVID-19 pandemic: a comprehensive analytical strategy by time-dependent modelling. *BMC medical research methodology*, 20(1), 1-7.

Handling missingness value on jointly measured time-course and time-to-event data. *Communications in Statistics-Simulation and Computation*, 1-21.

- 2019 Time-course data prediction for repeatedly measured gene expression. *International Journal of Biomathematics*, 12, 4, 1950033.
- 2018 Bayesian state-space modeling in gene expression data analysis: An application with biomarker prediction. *Mathematical Biosciences*, 305, 96-101.

# Publications in Medical journals (10 best papers)

2021 Risk prediction by Raman spectroscopy for disease-free survival in oral cancers. *Lasers in Medical Science*, 1-10.

Illustration of missing data handling technique generated from hepatitis C induced hepatocellular carcinoma cohort study. *Journal of King Saud University-Science*, 33, 101403.

2020 Low-cost oral metronomic chemotherapy versus intravenous cisplatin in patients with recurrent, metastatic, inoperable head and neck carcinoma: an open-label, parallel-group, non-inferiority, randomised, phase 3 trial. *The Lancet Global Health*, 8(9), e1213-e1222.

A competing risk analysis of death patterns in male genitourinary cancer. *Cancer Reports*, 3(4), e1174.

Identification of key genes and construction of regulatory network for the progression of cervical cancer. *Gene Reports*, 21, 100965.

Human papillomavirus elevated genetic biomarker signature by statistical algorithm. *Journal of Cellular Physiology*, 235(12), 9922-9932.

Should we wait or not? The preferable option for patients with stage iv oral cancer in covid-19 pandemic. Head & neck, 42(6), 1173-1178.

HER2 borderline is a negative prognostic factor for primary malignant breast cancer. *Breast cancer research and treatment*, 181(1), 225-231.

Aprepitant for cough suppression in advanced lung cancer: a randomized trial. *Chest*, 157(6), 1647-1655.

2019 Phase I/II study of palliative triple metronomic chemotherapy in platinum-refractory/early-failure oral cancer. *Journal of Clinical Oncology*, 37(32), 3032-3041.

#### Book

2020 Bayesian Approaches in Oncology Using R and OpenBUGS by Atanu Bhattacharjee, Chapman and Hall, CRC.ISBN 9781000329988

# CRAN listed R-packages developed

2021 MIIPW, highMLR, SurviMChd, SurvHiDim, autohd, longit, afthd

## Teaching

Post- Exploratory data analysis, Linear and logistic regression analysis, Parametric and non-parametric Graduate statistical inference, Bayesian data analysis, Linear mixed effect models, Survival data analysis, Longitudinal data analysis, Research methodology with R

## Research grant as Principal Investigator

- 2021-2024 Joint modeling of longitudinal and time-to-event data with multiple imputations, CSIR
- 2020-2021 Normal activity initiation by using Artificial Intelligence based technology to fight against COVID-19 in different hotspots of India, ICSSR
- 2020-2021 Bayesian individual-level modeling of the spread of COVID-19 Pandemic, SERB
- 2017-2020 Joint modeling of event time and nonignorable missing covariate data in survival and longitudinal analysis, SERB

### Ph.D supervision as external supervisor

- 2021 Modeling of gene expression for cancer biomarkers using Bayesian framework by Abin Thomas, Awarded
- 2021 Joint models for time-to-event and repeated measurement data by Souvik Banerjee, Submitted
- 2021 Modelling of missing observations in longitudinal measurements by Jesna Jose, Submitted