<u>The Department of Mathematics, Physics and Statistics inviting you Prof. Balgobin Nandram Lecture series on Undergraduate Research in Mathematics and Statistics</u>

<u>Title of Lecture 2 : Bayesian Small Area Estimation and Data Integration</u>

<u>Date: Monday, 16th May, 2022</u>

<u>Time: 6PM – 8 PM</u>

<u>Lecture 2 – Abstract</u>

We use Bayesian methods to show how to estimate the finite population mean of an area when data are available from similar areas, which have unreliable data. In a similar Spirit, we show how to combine data from two surveys, taken from the same population, to do Bayesian predictive inference for the finite population mean of the Population. We analyze data on body mass index and corn/soybean production.

<u>About Prof. Balgobin Nandram</u>

- Prof. Balgobin Nandram (Bal) is a native of Guyana. He received his Bachelor of Science Degree in Mathematics (Passed with Distinction) from the Department of Mathematics, Faculty of Natural Sciences, University of Guyana in 1977. He also received Diploma in Education (Mathematics Education) from the Faculty of Education, University of Guyana in 1979.

  Prof Bal earned a Master's degree in Applied Statistics at Imperial College of Science, Technology and Medicine in 1981. He then returned to Guyana, and after three years, he came to the United States, August 1984. He studied at first at the State University of New York at Albany, and after one year, he moved to the University of Iowa where he earned the Ph.D. in statistics after an additional four years.

  Currently (Since 2003) Prof Bal is working as a full Professor of Statistics at the Department of Mathematical Sciences, Worcester Polytechnic Institute, Massachusetts, USA. Prof Bal also served at the Department of Mathematics, University of Guyana, at the level of Lecture I and Lecture II from 1981 to 1984, and Head (ag.) of the department 1982-1984. Prof Bal has published nearly 200 peer

reviewed research articles, guided more than 20 students for PhD degree in Statistics, and nearly 30 students for the MS degree (also in Statistics). He is a fellow of the American Statistical Association, an elected member the International Statistical Institute and Sigma Xi, the scientific society of America.