## **Editorial**

Juan Sosaa

Department of Statistics, Universidad Nacional de Colombia, Bogotá, Colombia

Dear readers,

We welcome you to the second issue of the 48th volume of the *Revista Colombiana de Estadística* (RCE). Once again, I deeply thank authors, reviewers, and you, our esteemed the readers, for your unconditional support during all these years. As always, I extend my special thanks to *Patricia Chávez*, who leads our editorial processes and so many issues involving the Journal.

I would like to remind you that the Journal has available official social media accounts in LinkedIn at www.linkedin.com/in/revcoles as well as Facebook at https://www.facebook.com/revcoles. Please, keep follow us! Also, I wanted to remind you that we have updated our submission policy. Authors just need to submit their articles in PDF format (no particular template is required for submission), now in either English or Spanish language! Recall that the RCE is a biannual publication, aimed at disseminating knowledge, results, applications and reviews about any topic in Statistical Science.

This particular number has thirteen articles covering a broad spectrum of theory and applications, including new families of probabilistic distributions, survey sampling, small area estimation, unit and quantile regression, longitudinal data analysis, multivariate statistics, and epidemiology:

- 1. Multivariate Normality Test for Serially Correlated Data, by Shahzad Munir.
- 2. Two-Step Calibrated Designed Weighted Estimators of Finite Population Variance for a Mailed Survey Design Characterized by Non-response by Nonresponse, by A. Audu, M. Lekganyane, O. O. Ishaq and K. O. Aremu
- 3. Double Sampling Plan for OPPE Model Using Combined Mean, by Sudhansu S. Maiti and Shovan Biswas.
- 4. The Zografos-Balakrishnan Type-I Heavy-Tailed-G Family of Distributions with Applications, by Gomolemo Jacqueline Lekono, Broderick Oluyede and Lesego Gabaitiri.

<sup>&</sup>lt;sup>a</sup>Editor-in-chief. E-mail: jcsosam@unal.edu.co

2 Juan Sosa

Unit Regression Models to Explain Vote Proportions in the Brazilian Presidential Elections in 2018, by Renata Rojas Guerra, Fernando A. Peña-Ramírez, Tatiane Fontana Ribeiro, Gauss M. Cordeiro and Charles Peixoto Mafalda.

- 6. New Unconditional and Quantile Regression Model Erf-Weibull: An Alternative to Gamma, Gumbel and Exponentiated Exponential Distributions, by Caroline Cogo Carneosso, Thiago A. N. De Andrade and Cleber Bisognin.
- 7. A New Technique to Generate Families of Continuous Distributions, by Regent Retrospect Musekwa, Lesego Gabaitiri and Boikanyo Makubate.
- 8. Cancer Data Modelling: Application of the Gamma-Odd Topp-Leone-G Family of Distributions, by Chipo Zidana, Whatmore Sengweni, Broderick O. Oluyede, and Fastel Chipepa.
- 9. Joint Occurrences of Competing Risks and Multivariate Longitudinal Data: A Prediction Investigation for the HIV.long Data, by Jaber Kazempoor, Arezou Habibirad and Sanjoy Sinha.
- 10. A Review of the Use of Small Area Estimation in Colombia, by Felipe Ortíz Rico, Cristian F. Tellez Piñerez and Nicolas Ramirez-Vargas
- 11. Data-Driven Modeling of Impact of Differential Efficacy of COVID-19 Vaccines in Two Socio-Economically Contrasting Cities: New York, USA and Bogotá, Colombia, by Erika Johanna Martínez-Salinas, Viswanathan Arunachalam, Caitlin Seibel, Yutian Huang, Jackson Reisman, Moatlhodi Kgosimore, Anuj Mubayi and Padmanabhan Seshaiyer.
- 12. The Flexible Generalized Gamma Distribution With Applications to COVID-19 Data, by Alexsandro A. Ferreira and Gauss M. Cordeiro.
- 13. Analysis of Academic Data to Group Students According to Their Academic Risk, by Kevin Andrés Leal Pérez and Liliana López-Kleine

These articles not only present cutting-edge research but also offer practical applications and case studies that illustrate the real-world impact of these statistical methods. The diversity of topics highlights the interdisciplinary nature of modern statistics, bridging gaps between theoretical advancements and practical implementations. Researchers and practitioners alike will find valuable insights and innovative techniques that can be applied to their work, making this issue a vital resource for anyone involved in statistical research or application.

We as members of the Department of Statistics of the Universidad Nacional de Colombia take great pride in continuing to offer an open-access platform through the RCE, where high-quality research can be published without any article processing charges. Our journal is indexed in Scimago Journal & Country Rank (SJR), Scopus, Zentralblatt Math, IBN Publindex, SciELO Colombia, Latindex and Dialnet reflecting its recognized academic value. I am particularly enthusiastic about the 45 submissions we received at the beginning of 2024 from several countries around the world, including Botswana, Brazil, Canada, Colombia, India, Iran, Nigeria, South Africa, United States, and Zimbabwe. I keep inviting the international statistical and data science communities to support the RCE as an international, free, and open-access journal that ensures fair and rigorous peer reviews. Once again, I encourage researchers from around the world to submit their work to the RCE.

Editorial 3

I hope you enjoy reading it as much as I did! Please continue reading and submitting your work to the Journal.

 ${\bf Kind\ regards},$ 

Juan Sosa, Ph.D.