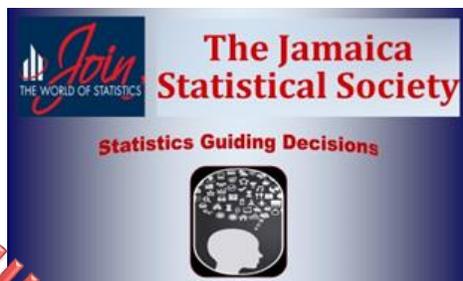


# THE JAMAICA STATISTICAL SOCIETY



## 4<sup>th</sup> BIENNIAL STATISTICS SYMPOSIUM PRE-CONFERENCE WORKSHOP SERIES

October 29 - November 1, 2019  
Kingston, Jamaica

**FIRST CALL FOR ABSTRACTS**  
**THEME: Data-Driven Solutions – The Answer to World Problems**

All abstracts should be submitted by **June 3, 2019** via email to  
[jssbiennial.rc@gmail.com](mailto:jssbiennial.rc@gmail.com).

## CALL FOR ABSTRACTS

The Jamaica Statistical Society (JSS) welcomes submissions for oral and poster presentations for its 4<sup>th</sup> biennial symposium, from data analysts, policy makers, and other practitioners in all sectors of society. We are inviting abstracts that feature the following:

- Data-driven approaches to identifying solutions to everyday problems
- Results of data analysis that can influence efforts to solve local and global problems
- Use of data for policy development

**Your submission and presentation can be based on the following topics:**

- Use of data for policy development and problem solving in the following fields:
  - ❖ Defence, National Security & Justice
  - ❖ Law
  - ❖ Science, Technology, Energy & Mining
  - ❖ Finance & Planning
  - ❖ Water, Land & Climate Change
  - ❖ Labour & Social Security
  - ❖ Agriculture & Fisheries
  - ❖ Foreign Affairs & Foreign Trade
  - ❖ Industry, Investment & Commerce
  - ❖ Health & Environment
  - ❖ Local Government & Community Development
  - ❖ Education, Youth & Culture
  - ❖ Tourism & Brand Jamaica IP
  - ❖ Sports & Entertainment
  - ❖ Transport, Works & Housing
- Data use in Governmental and Non-Governmental Agencies to solve world problems
- Features of Data Collection and Management – Security, Quality, Collection Platforms
- Interagency collaborations in the search for solutions
- Development of data management plans
- Data mining for statistical solutions
- Developing data sharing agreements - The legal framework
- The role of Big Data in solving world problems
- Ethical considerations in data analysis
- Safeguarding data quality
- Communicating valid and reproducible results

**Please note that your submission is not limited to the above-mentioned topics and inter-disciplinary works are highly encouraged.**

# INSTRUCTIONS FOR SUBMISSION OF ABSTRACTS

- Abstracts should not exceed 250 words<sup>1</sup> and should consist of the following:
  - ❖ Title of Presentation
  - ❖ Authors & their Affiliations
  - ❖ Aims & Objectives
  - ❖ Methods/Models Used
  - ❖ Results & Conclusions
  
- The corresponding author and his/her e-mail address should be clearly indicated.
- Examples of the format for abstracts are shown in page 4.
- Authors may specify whether they are submitting an abstract for an oral or a poster presentation but the final decision regarding the type of presentation (oral or poster) will be made by the scientific committee.
  
- The scientific committee will review the abstracts as soon as they arrive and the decision will be sent to the corresponding author by **July 29, 2019**.
  
- If a **letter of acceptance** of the abstract is required in order to seek funding support, apply for a visa or to make a claim for work-related considerations, an **early submission should be made**.
  
- All abstracts should be submitted by email to [jssbiennial.rc@gmail.com](mailto:jssbiennial.rc@gmail.com).
  
- The **deadline** for submitting abstracts is **June 3, 2019**.

<sup>1</sup> The 250 words exclude Titles, Authors and Affiliations

## Abstract Samples

### **Format 1**

#### **Cluster Effects in Fasting Blood Glucose from the Jamaica Healthy Lifestyle Survey II**

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#### **Background:**

Clusters can be defined at geographical or administrative boundaries such as enumeration district (ED), constituency, parish and/or regional levels. The intra-cluster correlation coefficient (ICC) quantifies the relative sizes of within- and between-cluster variability.

#### **Objective:**

To quantify within- and between-cluster variability in fasting capillary glucose (FCG).

#### **Methods:**

We utilized data from the multi-stage Jamaica Health and Lifestyle Survey (JHLS) II of participants from households within EDs, constituencies, parishes and health regions. Random effects maximum likelihood regression models estimated ICC to yield evidence of clustering in FCG.

#### **Results:**

Data from 2658 respondents aged 15-74 years across 101 EDs, 49 constituencies, 14 parishes and 4 regional health authorities (RHA) revealed no clustering at the RHA level, but at ED (ICC=0.056, 95%CI=0.035-0.085), constituency (0.045, 0.025-0.076), and parish (0.024, 0.009-0.056) levels. Three-level models of EDs nested within parish or constituency revealed statistically significant clustering at both levels, (parish:0.018, 0.005-0.061; ED: 0.057, 0.034-0.093) and (constituency:0.033, 0.014-0.074; ED: 0.056, 0.035-0.090). In a four-level model using parish, constituency and ED, the latter retained strongest evidence of clustering. Accounting for clustering also improved model fit (P<0.001 for all likelihood ratio tests.).

#### **Conclusion and Recommendation:**

Clustering in FCG exists at the ED, constituency and parish levels and is strongest at the ED Level. Models of FCG should account for this. These ICC values can also be used in sample size estimation for subsequent multi-stage cluster sampling surveys.

### **Format 2**

#### **Statistical Methods for Grants and Protocols: What Information Should be Conveyed?**

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Working collaboratively to determine an appropriate statistical analysis plan and sample size for a research project is a major cooperative effort. Two-way communications between statisticians and the investigators are key to understanding the study specific aims and outcomes, assuring the study design can answer the aims and hypotheses, producing valid estimates for sample size, and then providing a statistical analysis plan. All of this must be crafted into a product that can be understood by physician-scientists and other non-statistical scientists who make up the review committee. We will describe techniques and strategies for working with investigators and enhancing value on collaborative teams, with the primary goal being to further refine this presentation to ultimately be shared with non-statistician investigator audiences.