## STAT 854. Biometrics: Methods in Biomedical Studies (Spring 2023)

Assignment for the Course Project A (Phase I)

(due on Mon Feb 13 2023 by 17:00)

## • To identify

(a) a statistical issue about study design or data analysis from an article on COVID-19 pandemic published in an accessible journal/website, or

(b) a statistical question based on COVID-19 related data available to public at a website.

The issue/question should be not well-addressed in the article or by other researchers.

- To propose your approach to addressing the issue or answering the question.
  - You need to justify your approach has certain advantages over what is published in the original article or what have been used to answer the question.
  - The idea of your suggested approach may be from other published articles; however, you
    may not be able to just simply copy other people's work but need to figure out a way
    to adapt the existing methods.
- To put together a proposal, which is what to be turned in. The proposal should be limited to five (5) pages.

A suggested proposal includes the following:

- your study goal/objective
  - to better address the identified issue or answer the statistical question,
- the motivation
  - to summarize the published article where the problem is identified from or the COVID-19 data that stimulated the question, particularly on the part related to the issue/question
  - to justify the importance of your proposed work
- a proposed study design/inference procedure
  - to describe your approach
  - to present a feasible plan to demonstrate the potential advantage(s) of your approach over the published one(s)
- anticipated impact/significance of your study

Enjoy the Project!