

# 2021 Data Science Competition

## General Information and Prompt

### Teams

A participant list was provided by Mr. Lei Fang. There were three first year and three second year students on that list. The Organizing Committee created the following teams by randomly pairing those two sets of students:

- Team 1 – Lee Park [lee.park@uky.edu](mailto:lee.park@uky.edu); and Tori Stanton [victoria.stanton@uky.edu](mailto:victoria.stanton@uky.edu)
- Team 2 – Jiyeon Park [Jiyeon.Park@uky.edu](mailto:Jiyeon.Park@uky.edu); and Trevor Brewer [Trevor.Brewer@uky.edu](mailto:Trevor.Brewer@uky.edu)
- Team 3 – Henry Merryday [henrymerryday@uky.edu](mailto:henrymerryday@uky.edu); and Danny Manion [dtma229@uky.edu](mailto:dtma229@uky.edu)

### Dataset

- COVID data have been provided by Dr. Thompson and a codebook has been created explaining the origins of the data and the variables. You can access the codebook and the data [HERE](#). The data have been posted as two, separate .csv files. This is just for your convenience. We will refer to those two files jointly as “the dataset” in these instructions.

### Prompt

- Dr. Ann Toney-Fouchee is the Director of the federal government’s COVID response team. She has just become aware of these data but has not looked at them. She has assigned your team the job of analyzing the data and creating a written report for her and her team. Her team consists of a public health expert, a public policy expert, and two data scientists. You must also deliver an oral presentation in front of the two data scientists. They will be responsible for evaluating the quality of both the written report and the oral presentation.

### Written Report Requirements

- Submission Deadline: 8 a.m. March 27<sup>th</sup>.  
The report must be technically very thorough since the stakes are high in a pandemic. It cannot be over three pages in length, font 11 pt., line spacing no smaller than 1.5. The report must be written in a tone that facilitates quick assimilation by the Toney-Fouchee team. It must be submitted as a pdf file. You will upload your report [HERE](#). This is a Google Drive landing place so you will be asked to login with gmail credentials to access.

### Oral Presentation Requirements

- Presentation Day: March 27<sup>th</sup>  
In addition to the written report, teams must present before the judges. Each presentation slot will be strictly limited to 20 minutes. Teams were randomly assigned to the following time slots.
  - Team 1 – 3:00 p.m. – 3:20 p.m.
  - Team 2 – 2:00 p.m. – 2:20 p.m.
  - Team 3 – 2:30 p.m. – 2:50 p.m.

Prior to the 27<sup>th</sup>, Mr. Chris Gurtcheff will send every team member the presentation Zoom link and any further instructions for presentation day.

### Senior Student Consultation Panel

A group of three senior graduate students have agreed to act as advisors on a consultation panel. The rules of the competition allow up to **one hour** (total) consultation time with members of the panel. The purpose of the advisors is to make helpful, but general suggestions to teams who seek advice. The names and emails of the panel are listed below. Consultation is not restricted to email.

Li, Leiyue	<a href="mailto:Li.Lillian@uky.edu">Li.Lillian@uky.edu</a>
Brokman, Aviv	<a href="mailto:aviv.brokman@uky.edu">aviv.brokman@uky.edu</a>
Fang, Lei	<a href="mailto:lfa246@uky.edu">lfa246@uky.edu</a>

### Judges

There are two judges for the competition:

- Arny Stromberg – Allen-Anderson Endowed Professor, Department of Statistics
- Stacey Slone – Principal Statistician, Department of Statistics

### Rubric

All teams will be rated using the following rubric:

- How thorough was the analysis?  
1 (very superficial) .... 5 (very thorough)
- How appropriate was the analysis?  
1 (not appropriate) .... 5 (very appropriate)
- How appropriate was report for intended audience?  
1 (not appropriate) .... 5 (very appropriate)
- How coherent was report?  
1 (not coherent) .... 5 (very coherent)
- How effective was the oral presentation?  
1 (not effective) .... 5 (very effective)

### Prizes

Cash prizes will be awarded as follows:

- Winning Team – two \$45 cash awards.
- Second Place Team – two \$30 cash awards.