# Research Proposal

## Lumiere Research Scholar Program: Summer 2021

### Akshita Anant Badkundri

1. **Research Question:**

How do covid-related policies affect infection/death rates of minority groups? Specifically, could it be that covid related policies impact minority groups more than whites?

* Define covid related policies: Mask Mandates, Opening/Closing of restaurants & bars
* Define Minority Groups: Black, White, Asian

1. **Research Method:**

Data Collection:

* In order to collect my data, I will search covid databases from the last two years. We will search for time series data bases. The data sets will be of the following:

A) Dates when covid-related policy changes made(When were restaurants allowed to be open? /When were restaurants closed? /When was the mask mandate enforced? /When was the mask mandate relaxed? /Opening & Closing of Bars)

B) Daily Infection/Death Rates/Vaccine administration for different groups (Whites, Asians, African Americans, Latinos, etc.)

* The data will be obtained from both federal and state databases. I will use them to help me answer my question.

Data Analysis

* The goal is to assess changes(rise/dip) in the infection/death rates of each group as a consequence of covid related policy changes. To do this, I will be using time series, regression analysis. The goal is to model the relationship between covid related policy changes and death rates of different minority groups.

1. **Academic Context**

Research exists on the efficacy of covid-related policies, but I’ll be introducing the aspect of relating it with minority groups and whites. I would not be able to provide names of specific papers as I haven’t selected specific papers to refer to.

1. **How my Research Fits:**

Data functions as a mirror to the problems faced by society. Analysing data on impact of covid-related policies on different races can help guide policy decisions around covid-related policies to make specific changes, which benefit all, pertinent to the difference of impact on whites & minority groups. Ethnic & Racist Inequality persists in any given spectrum: employment, economic, as well as social. In these difficult times, where the world is struggling to fight the COVID-19 pandemic, measures have to be taken to ensure inequality does not prevail and decisions are taken not only to save/benefit only one sector whilst harming the others. Furthermore, identification of why exactly some groups get impacted more or less can be studied: the reasons why one group has the lowest death rates/infection rates can be applied for the betterment of the others. My research will fit into the research relating to this topic since I am putting an emphasis not only on the efficacy of these policies, but specifically how they impact different sectors of society. This research paper will primarily be quantitative data, since I will need to analyse daily infection/death rates of different races and record changes in these rates according to policies enforced. Identifying possible solutions will be viable once made aware of the current circumstance.

**5. Timeline**

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| Start Date | End Date | Weekly Goal |
| 28th June 2021 | 4th July 2021 | TOPIC: Research question to data  Due: Research Proposal |
| 5th July 2021 | 11th July 2021 | TOPIC: Data pre-processing and visualization  Writing an Introduction: Part 1 |
| 12th July 2021 | 18th July 2021 | TOPIC: Explaining Variation Part 1: Null Models  Writing and Introduction: Part 2  Due: Outline |
| 19th July 2021 | 25th July 2021 | TOPIC: Explaining Variation Part 2: Explanatory Variable  Writing a Methods Section |
| 26th July 2021 | 1st August 2021 | TOPIC: Time Series Analysis  Writing Methods Section |
| 2nd August 2021 | 8th August 2021 | TOPIC: Interpreting Generalized Linear Models  Writing Conclusions  Due: First Draft |
| 9th August 2021 | 15th August 2021 | Writing Conclusions |
| 16th August 2021 | 22nd August 2021 | Refine Research Paper |
| 23rd August 2021 | 29th August 2021 | Due: Final Write Up |

**6. Publication Goals**

Currently, my publication target is the 'Journal of Young Investigators' as it it’s most suitable for me & the formatting requirements of the journal are simple enough for me to follow.

**7. Possible Roadblocks & Concerns:**

A possible roadblock for my research paper is the availability of data. As my research paper is based on analysis of data, having sufficient data is extremely important. One of my major concerns is not having enough data on minority groups as well as policy changes. Another concern I have is the amount of time I am able to commit per week during the month of August and early September. Being in 12th standard, I‘ll have exams to prepare for my upcoming board exams and will be applying for colleges. I will not be able to slow down the pace of my weekly tasks as my board exam preparation will only increase incrementally from August. The only solution I currently have in mind is to follow a strict schedule. Ideally, I will be able to complete all the tasks I have well in time and ensure the best quality.