

UNDERGRADUATE BIG DATA CHALLENGE 2020

PUBLIC AND PERSONAL HEALTH DECISIONS



WELCOME



HCCPS://app.dimensions.ai/discover/publication















THE TEAM



ANISH VERMA



LYDIA ODILINYE

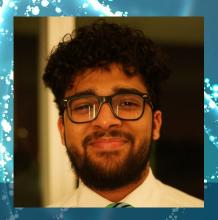
THE TEAM



ELVIRA NURMAMBETOVA



REETA NAN



FAIQ AHMAD



Dr. ALEXANDRE (SACHA) NOUKHOVICCH FOUNDER OF STEM FELLOWSHIP



We are living in a time of global viral pandemic, where the impact of personal health decisions and public health policies is profound.





In the age of open data, there is a treasure trove of information to work with. This brings its own set of problems, but the potential for world-changing solutions is immense.



These policies are best guided and shaped by scientific results and thorough data analysis.

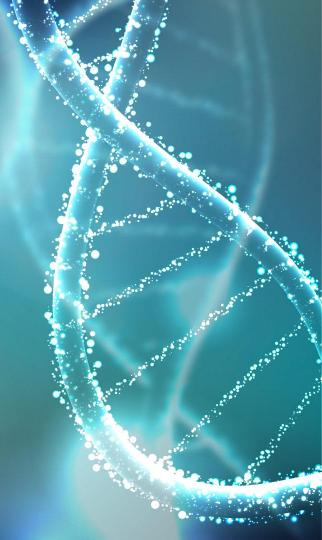


ENDLESS POTENTIAL TO SOLVE PROBLEMS:

- COVID-19 and comorbidity data to identify at-risk groups, to motivate the development of policies and protect them.
- Efficacy of plans in place to prevent the spread of disease For example, looking at the WHO's plan to prevent outbreaks of influenza derivatives.
- Change in consumer behaviour and the rise of heart disease.
- How changes in population dynamics correlate with implementation of public policies.

RESOURCES:

- Many large and varied datasets.
- Expert mentors.
- Workshops to teach you the tools to succeed and analyze data.
- Logistical help from our team.





Best Overall Awards

1st Prize: \$1500 + Publication in STEM Fellowship Journal

2nd Prize: \$6003rd Prize: \$400

Outstanding Research and Methodology Awards

1st Prize: \$1500 + Publication in STEM Fellowship Journal
 2nd Prize: \$600 + Publication in STEM Fellowship Journal

3rd Prize: \$400

Public and Personal Health Innovation Award

\$1000 awarded to the most innovative and practical solution

\$1500 worth of technological prizes

• These prizes will be given based on merit

Opportunity to engage with Roche (Eastern Canada only)

• Opportunity to visit Roche in Toronto to learn how big data can be used in the pharma setting to address pertinent questions related to health outcomes for patients.

Access to the National Diabetes Repository and Workshop

• Diabetes Action Canada will provide controlled access to the National Diabetes Repository in the form of a workshop.





SCHEDULE

MAY 22	MAY 23	MAY 24	MAY 25	MAY 26	MAY 27	MAY 28	MAY 29	MAY 30	MAY 31	JUNE 22
INTRO	STATS	MACHINE LEARNING		LATEX OVERLEAF					DEADLINE	FINALISTS PICKED
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01 SAS

Run by SAS Canada. You will learn the essentials of the SAS platform.

O3 PYTHON

This workshop teaches you how to use Python to analyze, manipulate, and sort data.

O2 STATISTICS + R

Using R as a computational tool, the fundamentals of statistical analysis are taught.

04 MACHINE LEARNING

This will teach you machine learning methods in an accessible and enriching way.

05 Latex + Overleaf

LaTeX is the tool of choice for typesetting in academia, and here you will be taught how to use it through Overleaf, an online platform.



MENTOR-MENTEE DYNAMIC



MENTOR

Mentors will provide general guidance, and thoughts on the mentees' proposed methods and solutions, given their years of expertise and experience.

MENTEES

Mentees will do the bulk of the work, however, when they run into blocks, they can seek guidance from their mentors. Beyond this, they can use this as a networking opportunity.

A STRONG PROJECT

The final project created by the teams with the guidance of the mentors will be fleshed out and compiled in LaTeX, ready to be judged.

