# Collaborative Research: SaTC: CORE: Small: Understanding how visual features of misinformation influence credibility perceptions

## Challenge:

- Today's misinformation posts have increasingly been created and consumed in visual formats, such as images, videos, and data visualizations.
- Because of visuals' superior impression, retention, virality and persuasiveness, visual misinformation poses a significant threat to national security, social cohesion, and public health.
- Yet, we know relatively little about how specific visual features may influence people's credibility perceptions.

## Solution:

- Drawing broadly from literature in computer science, marketing, cognitive science and communication, and using computational vision analysis, experiments, qualitative interviews, and large-scale human annotation, this research aims to:
- 1) identify the specific visual features and mechanisms which may influence people's credibility perceptions,
- 2) examine how these visual features interact with non-visual features (source, virality, etc) and individual user characteristics
- 3) examine how these visual features can be effectively leveraged in misinformation correction efforts.
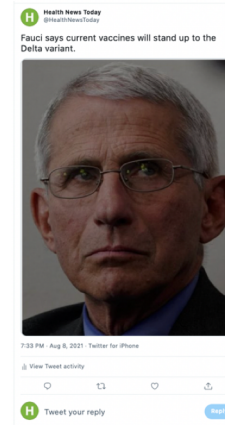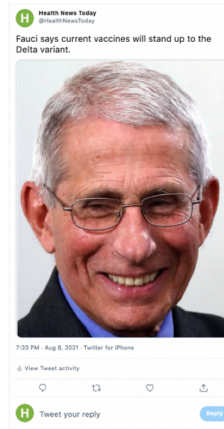


## Scientific Impact:

- The project will significantly extend existing misinformation research by systematically examining the effects as well as the mechanisms of visual features on credibility perceptions of image and short video posts.
- While existing misinformation datasets have largely focused on the veracity of messages, our dataset will be the first to provide credibility perception along with other relevant outcomes such as attention, emotional reactions and aesthetic appeal.

## Broader Impact and Participation:

- Expose the public's vulnerabilities to specific types of visual misinformation
- Help public agencies and social media platforms target prevention and correction efforts to the most misleading visual misinformation posts and the most susceptible user groups.
- Curate and publish a large dataset of misinformation-related visual posts with rich human annotations.

For more information