

# Engaging the Public to Fight the Spread of Scientific Misinformation



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August 6, 2021

# About Me

- Colorado School of Mines
  - Senior in Engineering Physics
  - Interest in Space and Planetary Science
  - Master's in Materials Science
- Born and raised in the Pacific Northwest
- The daughter of two high school video production teachers
  - Interest/Experience in Media and Communications
- Heavily involved in service
- SPS, SWiP, Undergraduate Research



# Overview

What engages our members?



How can we train our members to be better communicators?



Why does misinformation spread?



How effective is this type of campaign?

# Methodology

## Analysis



- Interest
- Involvement
- Motivation
- Social media engagement

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## Strategy



Combined the analysis of the survey and research to develop a proposal

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## Research



- Survey
- Goals
- Possible Paths
- Motivations
- Previous and ongoing attempts

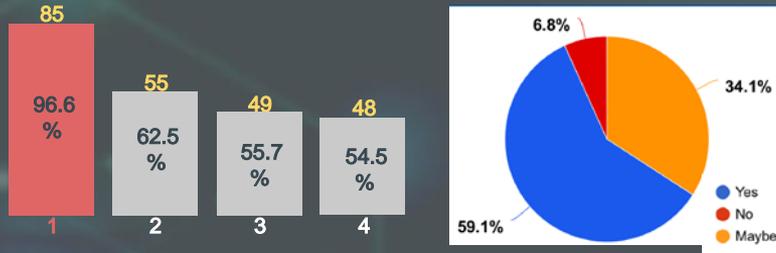
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# Research: Survey and Current Attempts



## Survey Findings



VS.

## External Findings

- 76% to 88% of anti-vaccination websites leverage emotional appeals
- Anti-vaccination groups have a much more prevalent presence on social media than pro-vaccination groups

### Member Responses

1. I see the topic of combating scientific mistrust and misinformation as important
2. I want to become more involved in public engagement
3. I see this training as applicable to my social endeavors
4. I see this training as applicable to my professional endeavors



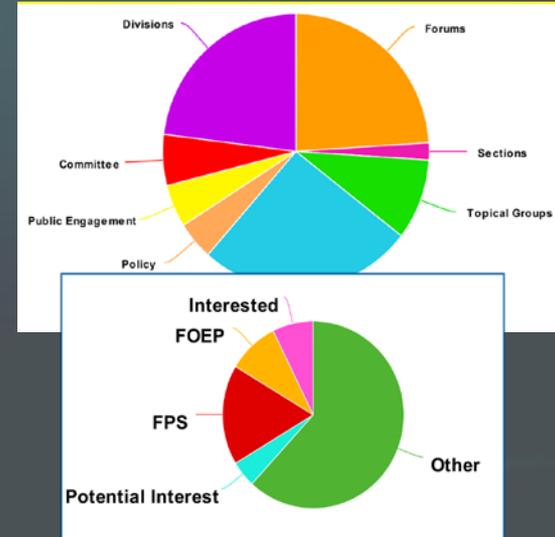
# Analysis: Identifying our Audience



## Relevance

- Understanding potential participation
- Understanding member motivations
- Understanding possible issues
- Identifying possible thought leaders

## Member Profiles



# Strategy: Outlining a Clear Path Forward



Example: I suggested using a non-partnered approach to vaccine hesitancy...

To teach people how to have productive, meaningful conversations about controversial science topics in order to help combat the spread of misinformation in their own neighborhoods, also teaching our members valuable communication skills they can bring into the workplace

Audience members are interested in this initiative

Audience of members is trained with the skills to communicate effectively



These members are motivated to engage in these discussions

Members have productive community discussions



## Keep It Simple

# Results: Concerns and What I've Learned



## Social Media Usage



### Implications:

- It may be more difficult to motivate and mobilize people to adjust these habits
- We may run into issues of uncomfortability even with Critica training



# Questions