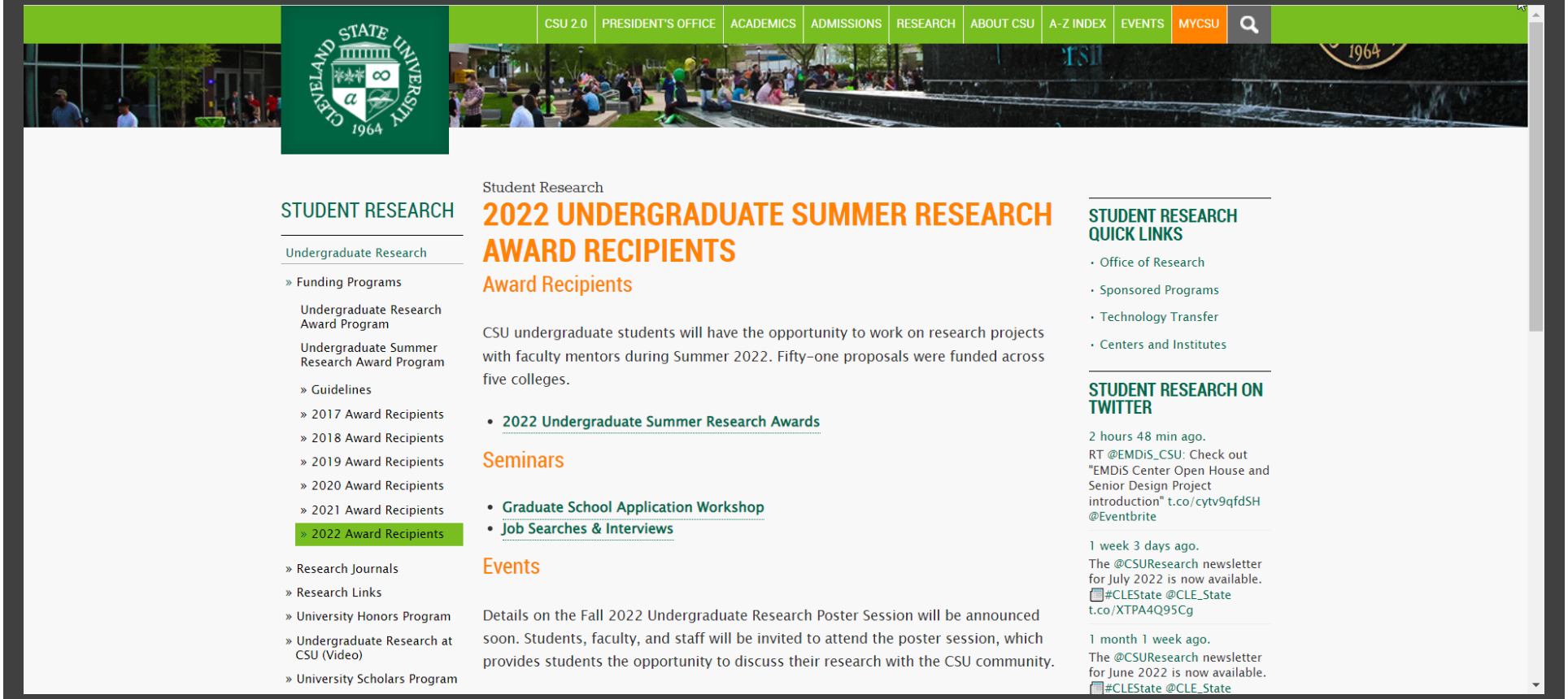
How to Prepare and Present a Great Research Poster

Dr. Jacqueline Jenkins

Civil & Environmental Engineering Department

July 26 & 27, 2022



https://www.csuohio.edu/student-research/2022-undergraduate-summer-research-award-recipients

August 12

- Deadline to submit poster title and authors

September 9

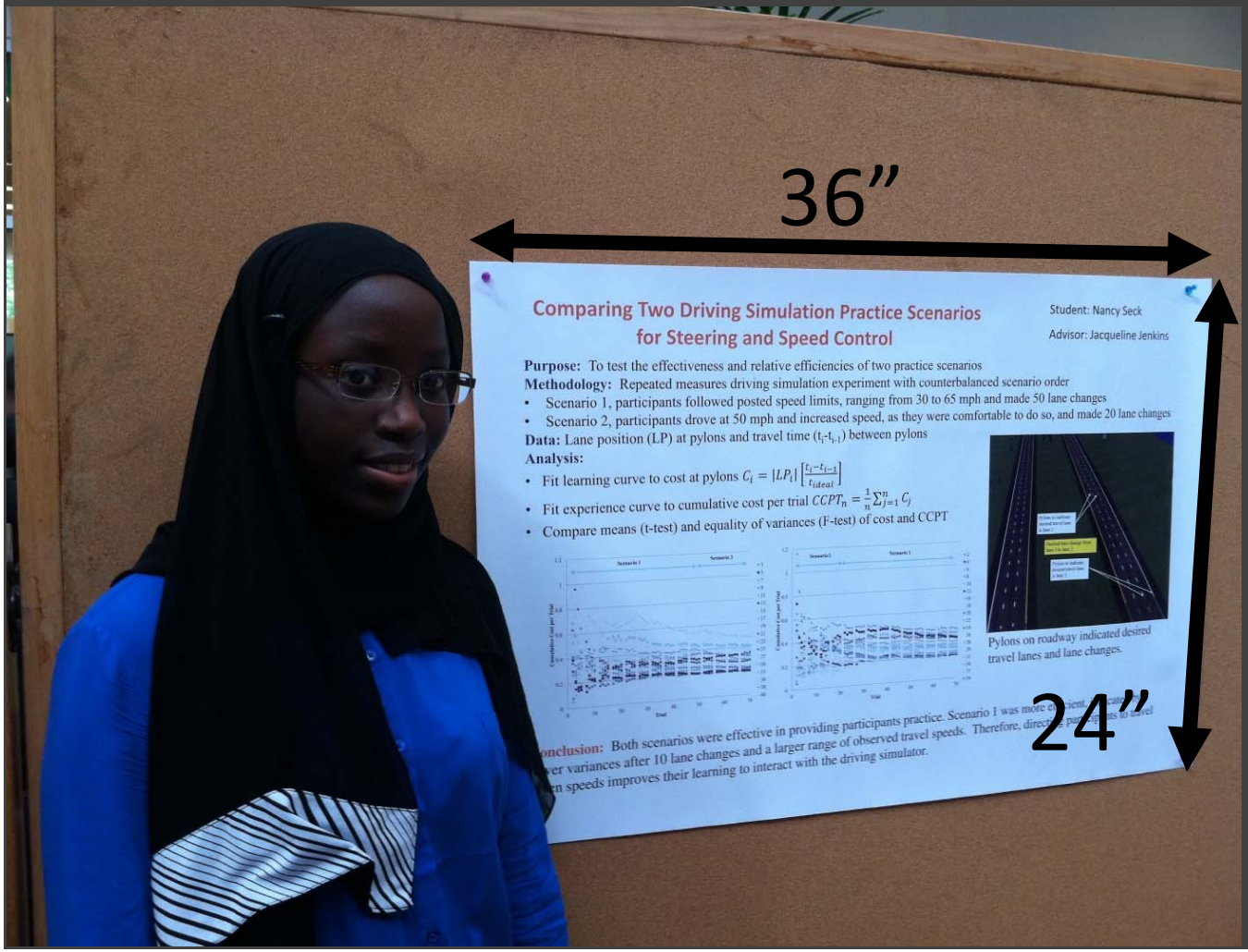
- Deadline to submit abstract and poster
- Advisors email the CSU library the electronic version (i.e. pdf) of your poster for printing

September 22

- Tentative date for the 2022 Undergraduate Summer Research Award Poster Session

Poster Size

- Typically 4 ft × 3 ft, or 3 ft × 2 ft
- Landscape orientation
- Library plotter has 42” width



PowerPoint
Adobe Illustrator
InDesign
Canva
Publish-It
Corel Draw
LaTeX, etc.

CSU library requires pdf file for plotting

Preparing Your Poster

Traditional Research Poster

Anatomy of an Ace Research Poster
https://inchemistry.acs.org/content/inchemistry/en/college-life/research-poster-infographic.html

Scientific Poster Design - Good and Bad Examples!
https://www.youtube.com/watch?v=agtgnJP3KoQ

Designing Research Posters
https://www.youtube.com/watch?v=XDJeSj7u488

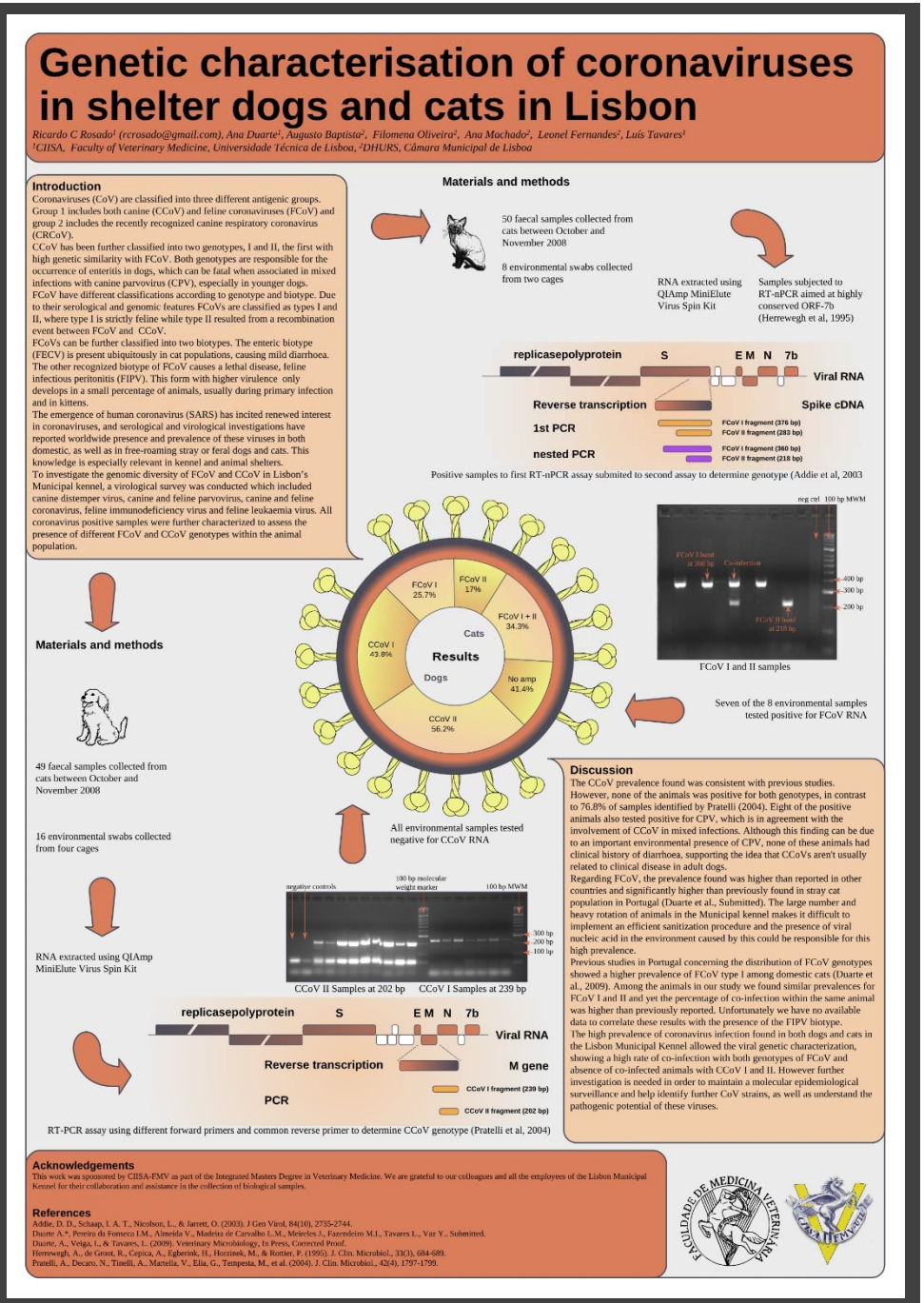
Contemporary Research Poster

Mike Morrison, March 2019, How to create a better research poster in less time
https://www.youtube.com/watch?v=1RwJbhkCA58

Mike Morrison, July 2020, How to create a better research poster in less time
https://www.youtube.com/watch?v=SYk29tnxASs

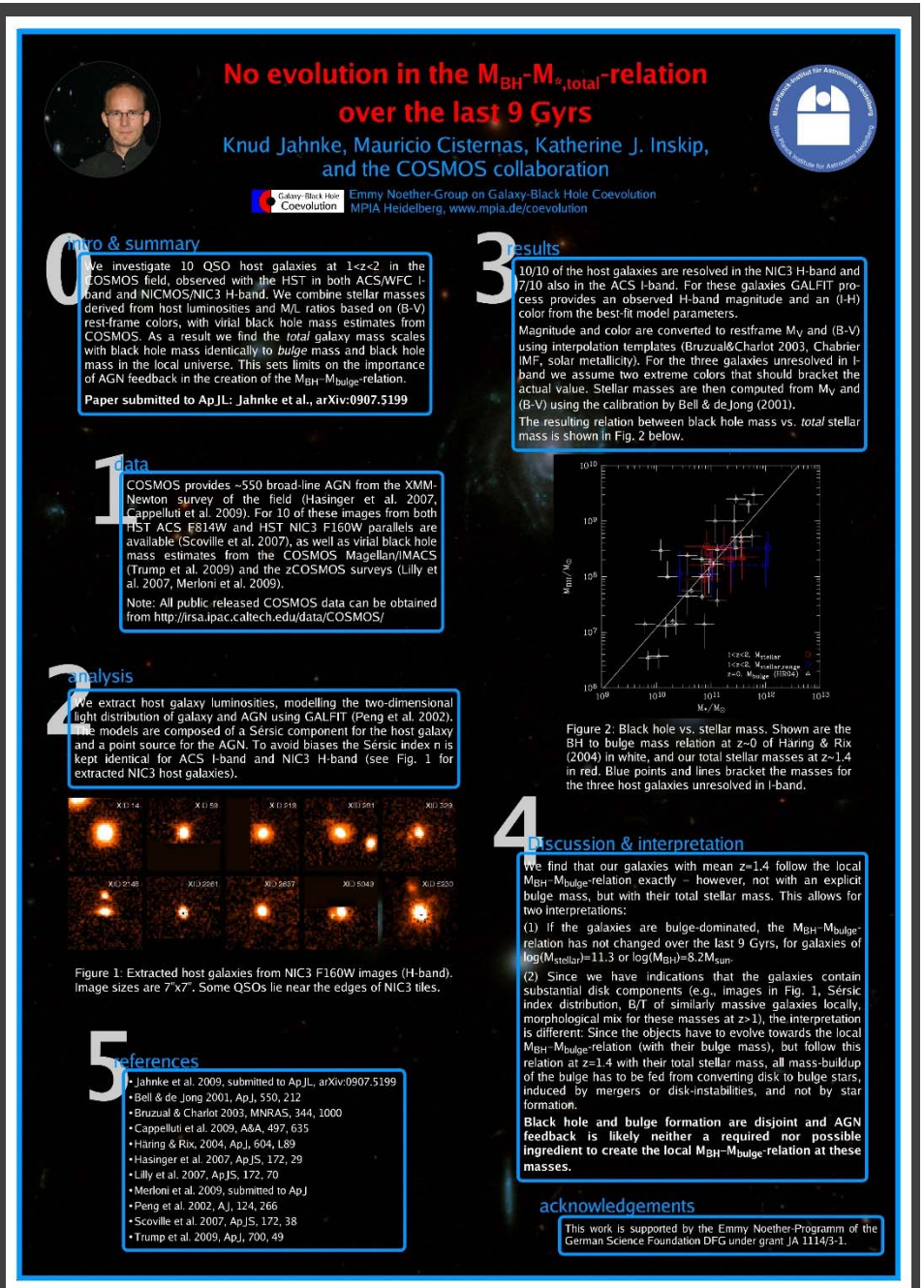
Traditional

- Content
  - Goal
  - Audience
  - Environment
  - Expectations
  - Restrictions



Traditional

- Aesthetics
  - Arrangement
  - Spacing
  - Balance
  - Fonts
  - Color



Knud Jahnke, 2009 ,CC-BY-SA-4.0
https://commons.wikimedia.org/wiki/File:Scientific_poster_by_Knud_Jahnke_for_International_Astronomical_Union_meeting_2009,_Rio_de_Janeiro.jpg

Traditional

- Technical
  - Software
  - Spelling & grammar
  - Image quality

Contemporary

Billboard

Generalmiaow, CC-BY-SA-4.0
https://en.wikipedia.org/wiki/File:Drive_on_Left_sign,_Dublin_Airport,_August_2019.jpg

Museum Exhibit

Tim Evanson, CC-BY-SA-2.0
https://commons.wikimedia.org/wiki/File:Dinosaur_exhibit_-_Cleveland_Museum_of_Natural_History_%2834800587755%29.jpg

Title:
Subtitle

PRESENTER:
Leeroy Jenkins

BACKGROUND: Who cares? Explain why your study matters in the fastest, most brutal way possible (feel free to add graphics!).

METHODS

1. Collected [what] from [population]
2. Tested it with X process.
3. Illustrate your methods if you can.
4. **Try a flowchart!**

RESULTS

- Graph/table with **essential results only**.
- All the other correlations in the ammo bar.

Main finding goes here, translated into **plain English**. **Emphasize** the important words.

Visualize your findings with an image, graphic, or a key figure.

Take a picture to **download** the **full paper**

AMMO BAR

Delete this and replace it with your…

- Extra Graphs
- Extra Correlation tables
- Extra Figures
- Extra nuance that you're worried about leaving out.
- **Keep it messy!** This section is just for you.

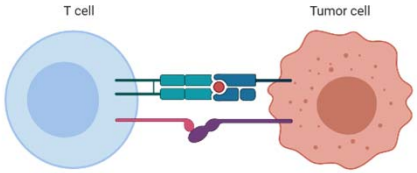
Leeroy Jenkins, author2, author3, author4, author5, author6, author7, author42

Teach people something cool you learned in 5 seconds as they walk by (or scroll by).

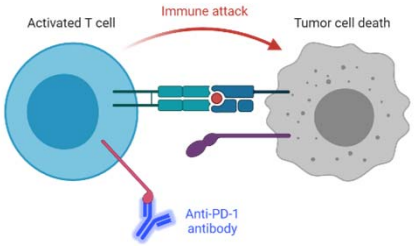
(illustrate your takeaway point)

Method

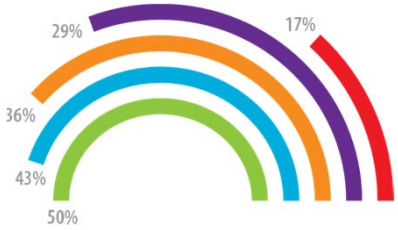
Immune checkpoint inhibits T-cell activation.



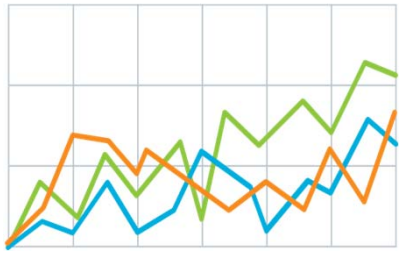
Anti-PDF-1 antibodies permit T cell activation.



Explain what the graph shows. Like, **spoilers are good.**



Quickly explain what the graph shows. **Help people think.**



LEM HEWITT, Phillip Merman, Ted crisp

EXAMPLE Graphics donated by biorender.com

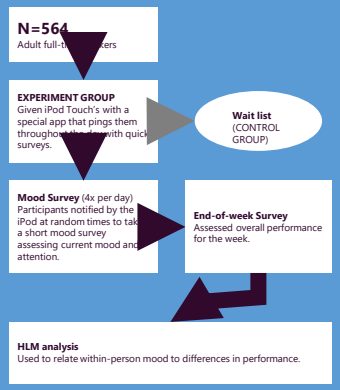
PRESENTER

Lem Hewitt

Background

Who cares? Explain why your study matters in the fastest, most brutal way possible (feel free to add graphics!).

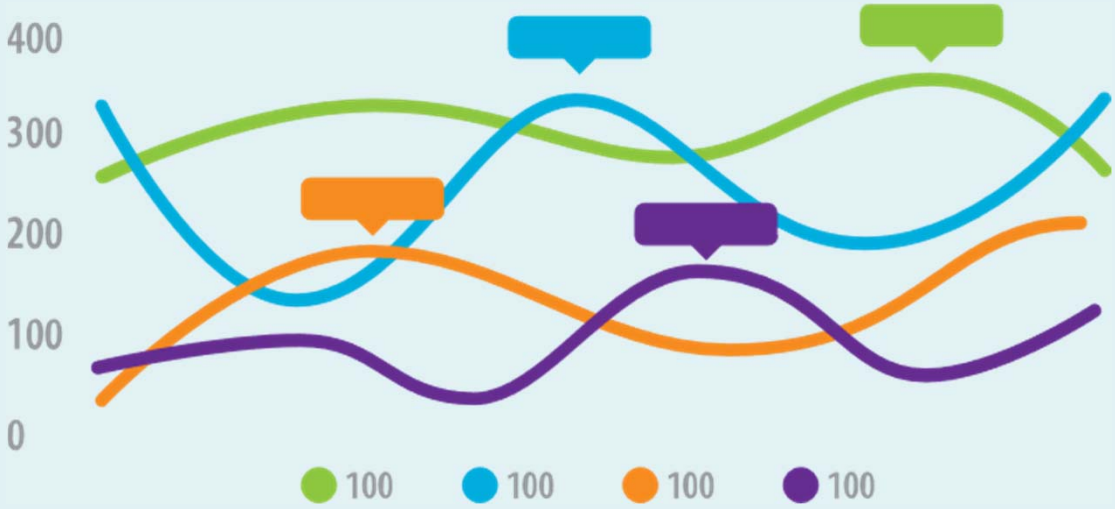
Methods



Extra results

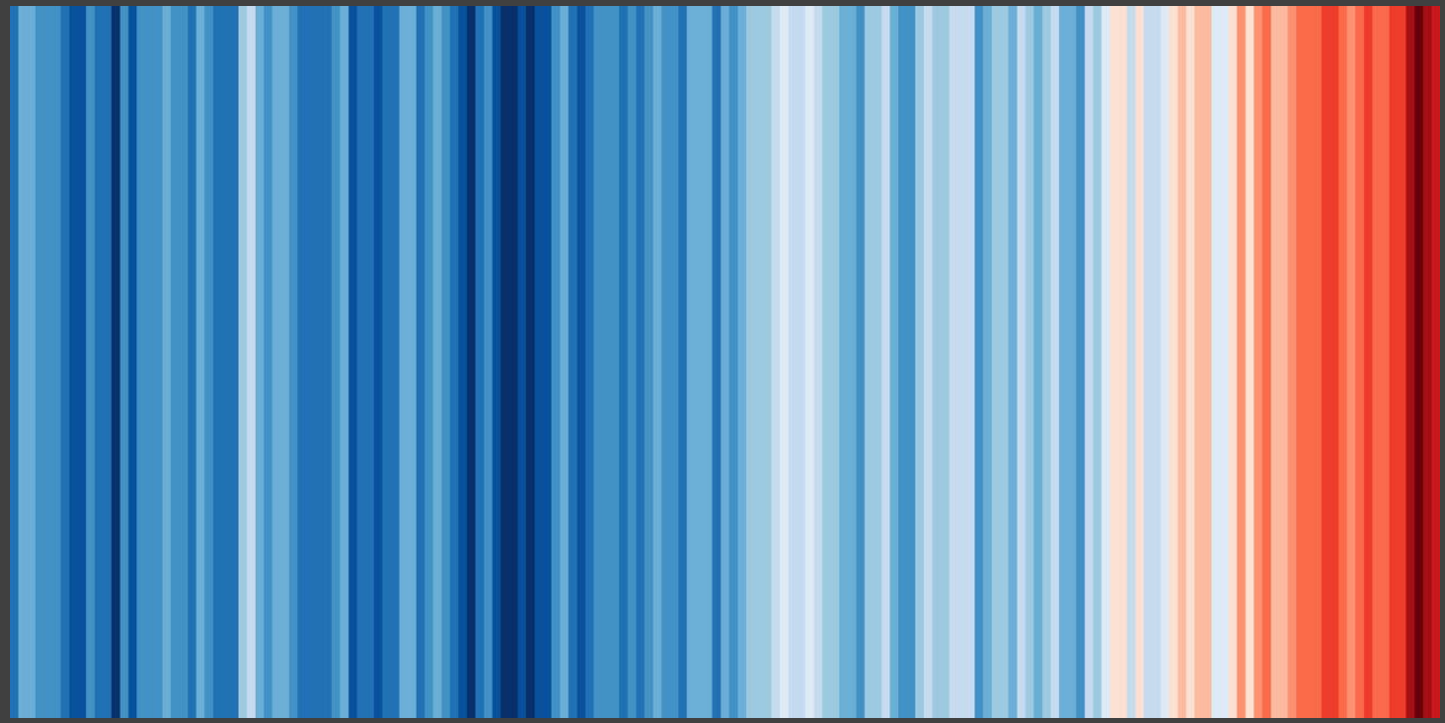
Assume they already read your punchline, and now include a little extra detail.

Teach people something cool you learned in 5 seconds as they walk by.



LEM HEWITT, Phillip Merman, Ted crisp, veronica palmer

Average global temperature 1850 – 2018



ED HAWKINS
SHOWYOURSTRIPES.INFO

We Don’t Have to Pick a Side: The Middle Is A Fine Place to Be

Andrew R. Smith
Appalachian State University

INTRODUCTION

Mike Morrison created a template for a “Better Scientific Poster” (BSP) (https://osf.io/ef53g/)

The BSP format has been praised by many, yet disparaged by others.

The current project had 2 goals:

1. Create a template that I think could be useful.
2. Point out that we don’t need to either love or hate the new format—the middle is just fine.

METHOD

To create a new template, I identified strengths of the BSP template and the traditional format.

BSP strengths: clear take-away message, minimal text, QR code

Traditional format strengths: room for figures, reasonable text size on sides, large title to make finding posters in poster session easy, web link and email for people who don’t like QR codes

Why must we pick sides?

The new poster format is a revolution, or the new poster format is garbage!

Take the **good parts** of the new format, keep the **useful aspects** of the traditional format, add in your own ideas, and **create something better**.

Poster template: https://osf.io/ayjzg/
smithar3@appstate.edu

RESULTS

Preregistered analysis: 78% increase in liking compared to traditional format and 24% increase compared to the BSP format.

Exploratory analysis: room for improvement in this template (Arial font, seriously?!?!).

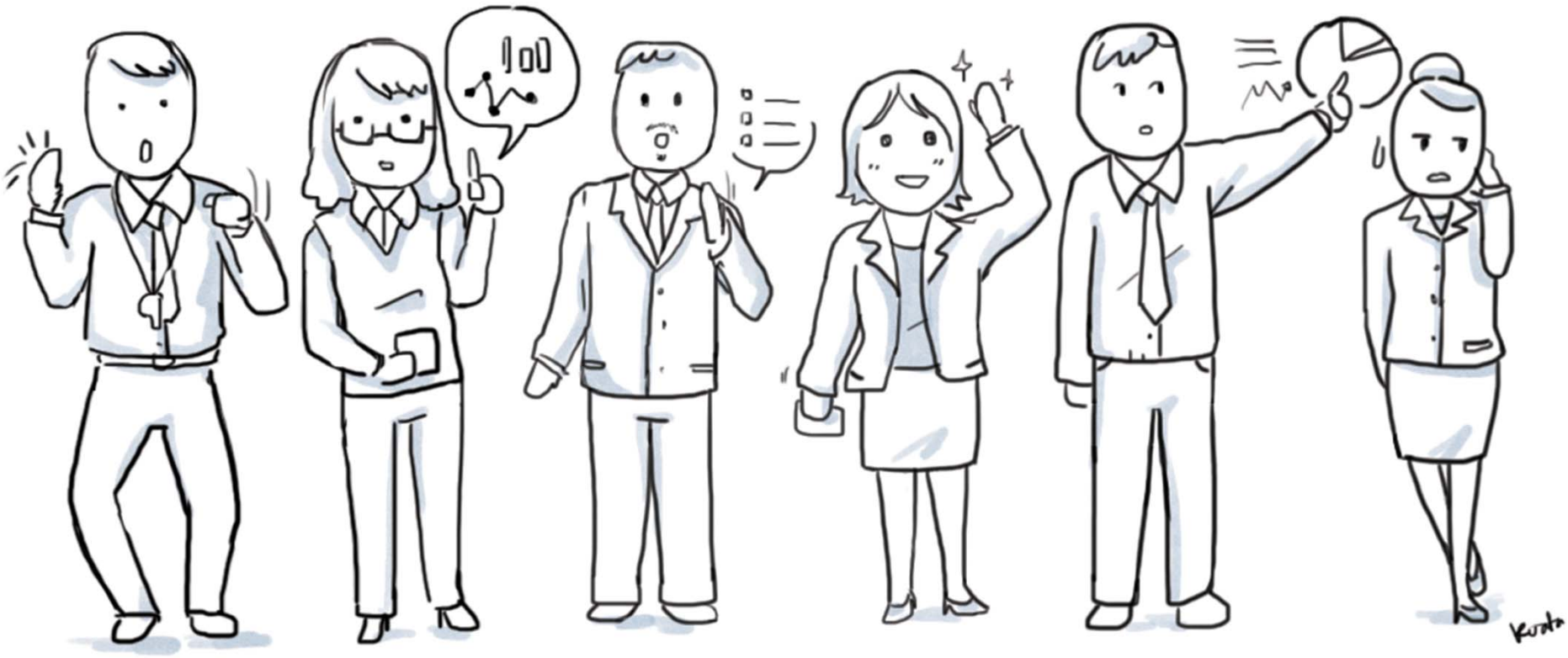
DISCUSSION

Sometimes it makes sense to pick a side; this is not one of those times.

Praise what you like, make suggestions for improvement, and **then make something better**.

Take Mike’s ideas, incorporate some of mine, **be creative**, and let’s make posters more useful.

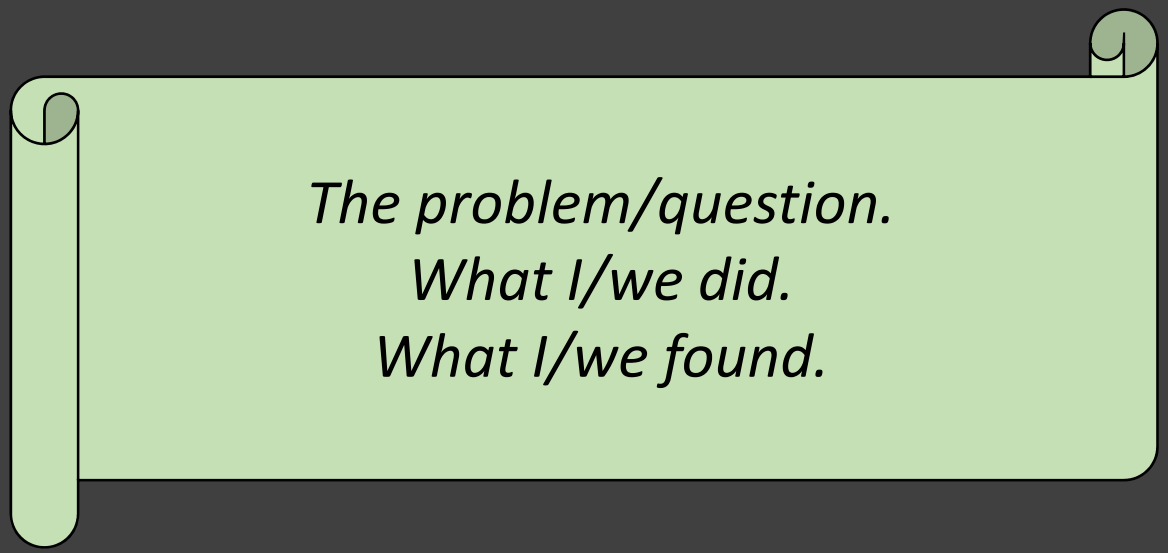
Presenting Your Poster


The Coach
The Inventor
The Counselor
The Storyteller
The Teacher
The Coordinator


The Drone
The Teacher
The Movie Star
The Relationship Builder
The "excellent" Presenter

Spiel

- In 2 or 3 sentences, tell me about your research
- Audience appropriate
  - Technical jargon
  - Layman terms



Engage the audience

- Prepare a couple questions
- Audience appropriate
  - Technical jargon
  - Layman terms

Familiarity with the problem/question.
Knowledge about the research method/apparatus.
Potential impact on their job/family/life.

Setting the stage

- Dress the part
- Meet your neighbors
- Clear the poster area
- Remain attentive

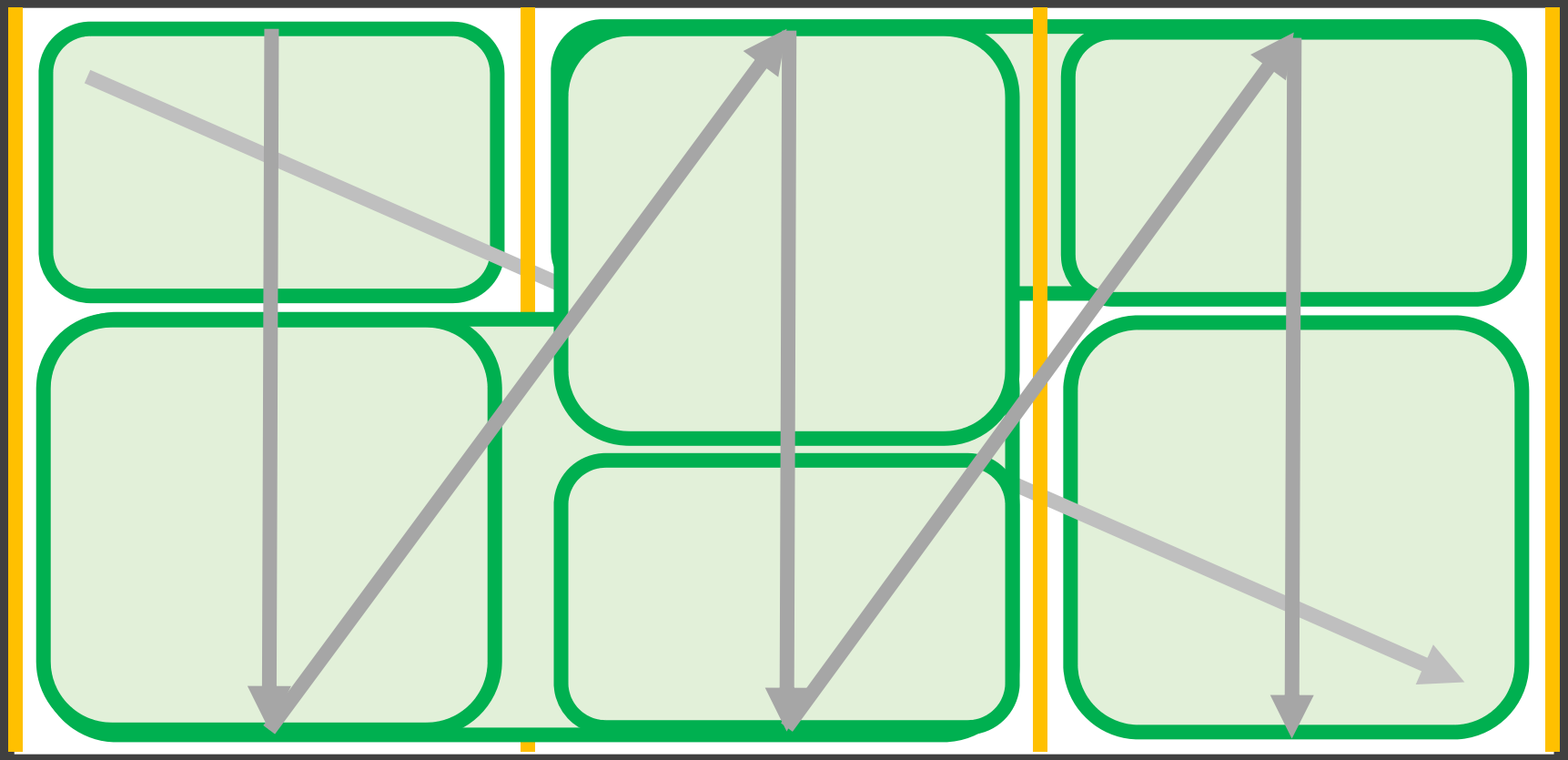
Don’t Forget…

Have fun sharing your research and meeting new people!

Undergraduate Student

RESEARCH

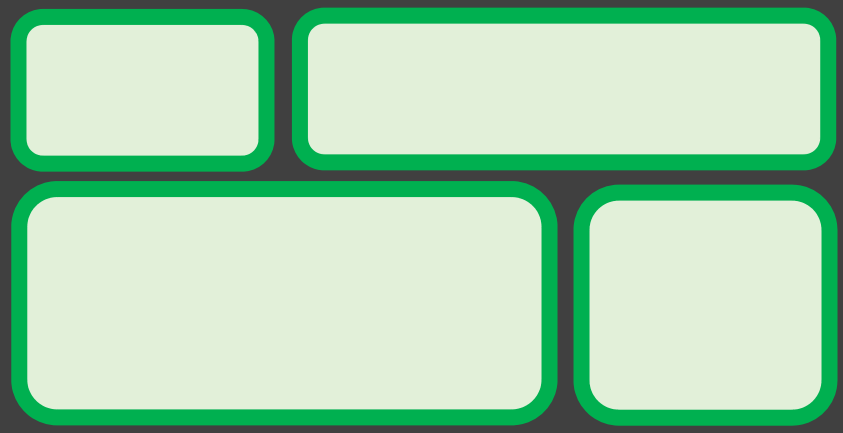
Arrangement



Which has better spacing?

GREEN

WHITE



Which has better spacing?

GREEN

Pink Floyd
THE WALL
1979
Another Brick in the Wall
Roger Waters

We don't need no education
We don't need no thought control
No dark sarcasm in the classroom
Teachers leave them kids alone
Hey! Teacher! Leave us kids alone!
All in all you're just another brick in the wall.
All in all you're just another brick in the wall.

Daddys Flown Across the Ocean
Leaving Just a Memory
A Snapshot in the Family Album
Daddy what else did you leave for me?
Dad What You Leave Behind for me?
All in all you're just another brick in the wall.
All in all you're just another brick in the wall.

When we grew up and went to school, there were certain teachers who would hurt the children anyway they could by pouring any region upon anything they did, exposing every weakness and carefully they did to the kids.

WHITE

Pink Floyd
THE WALL
1979
Another Brick in the Wall
Roger Waters

We don't need no education
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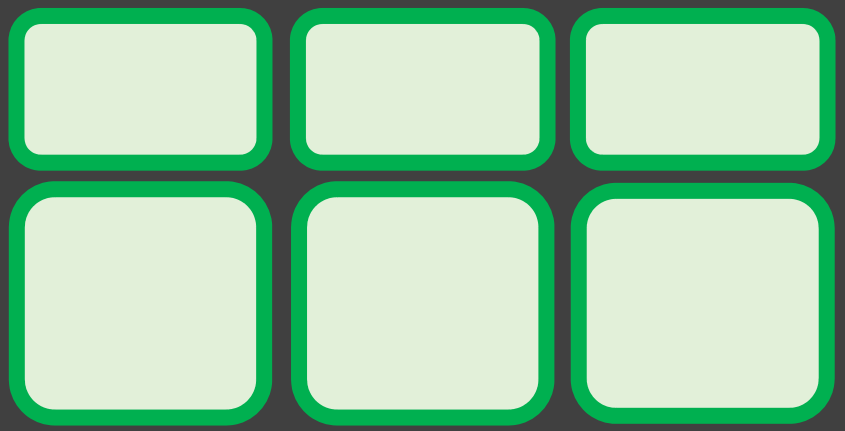
When we grew up and went to school, there were certain teachers who would hurt the children anyway they could
by pouring any region upon anything they did, exposing every weakness and carefully they did to the kids.

Which has better balance?

GREEN

WHITE



Fonts

84 to 96 pt Title

30-56 pt Authors

30-48 pt Headings (San serif font)

24-32 pt text (Serif font)

18-24 pt text for references, acknowledgements, captions

Which do you prefer?

GREEN

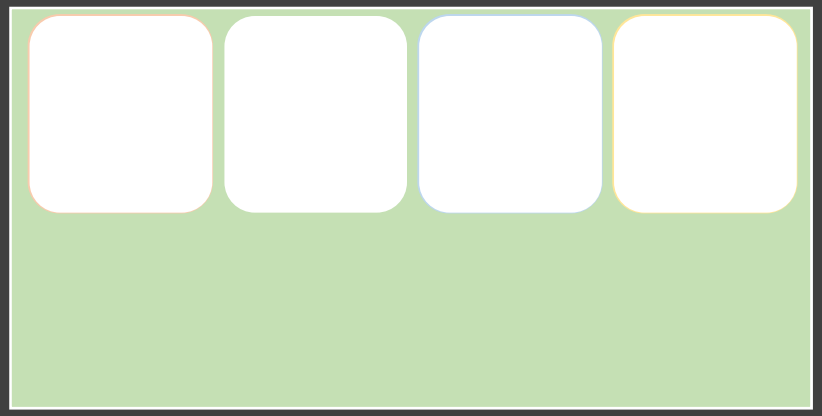
Text

WHITE

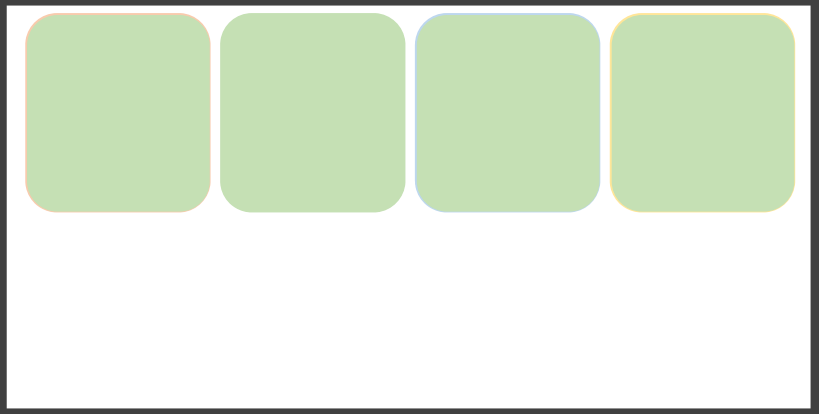
Text

Which do you prefer?

GREEN



WHITE



Which do you prefer?

GREEN	WHITE
Text	Text

CSU Representatives

https://www.csuohio.edu/marketing/brand-style-guide

- CSU color palette
- CSU seals
- CSU logos