

Communicating Your Science to the Public

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Your Science to the Public
Program

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cctsi.cuanschutz.edu

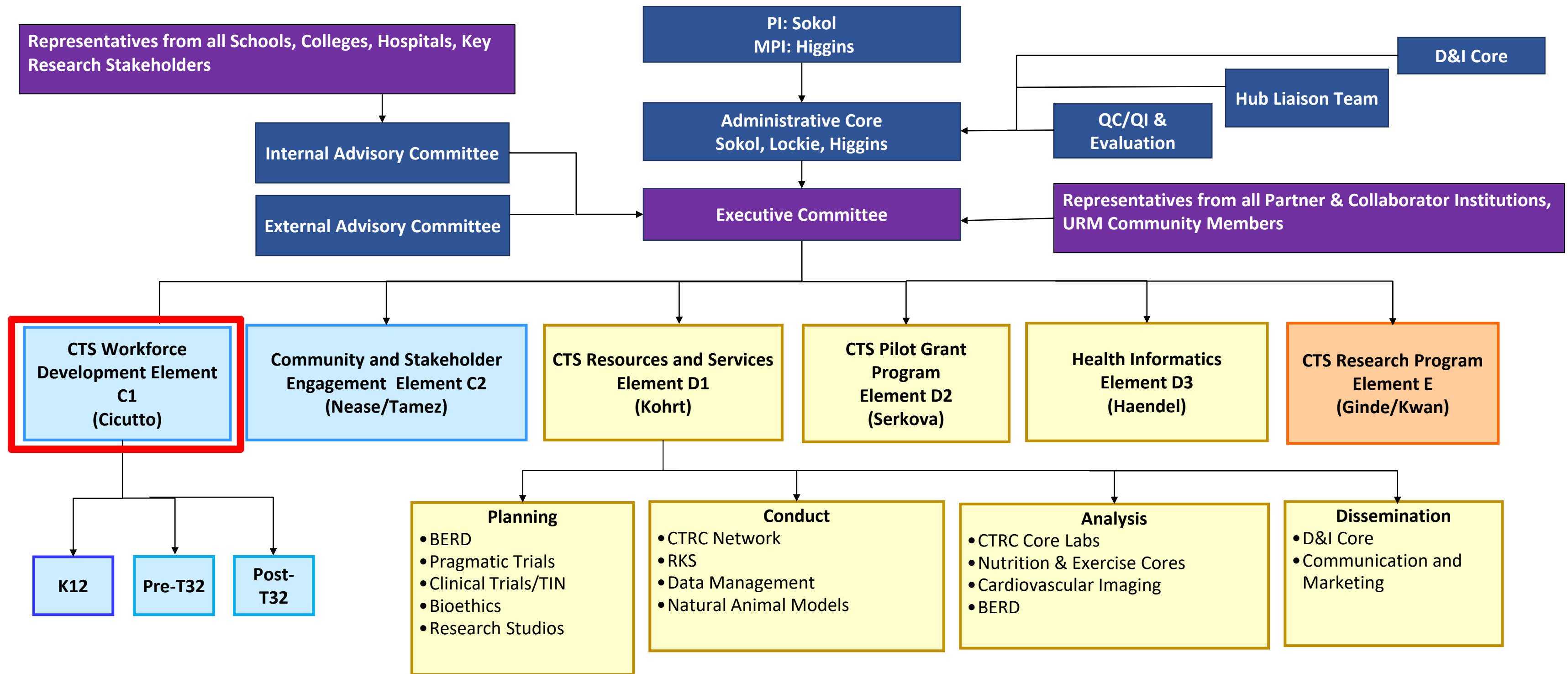


Colorado Clinical and Translational
Sciences Institute (CCTSI)

UNIVERSITY OF COLORADO DENVER | ANSCHUTZ MEDICAL CAMPUS



Integration Across CCTSI



Leadership Team & Diversity



Aimee Bernard,
PhD



Wendy Meyer,
MA

- **Key Personnel:**
- Comilla Sasson, MD, PhD
directed program from 2021 through 2023
- Aimee Bernard, PhD and Wendy Meyer, MA
co-directors starting 2024
- Core Group of Facilitators from 2021 - 2023
Sonia Gutierrez, Chanthy Na, Leslie Wright, Jennifer Meckles, Wendy Meyer

ELEMENT C: Training and Outreach
“SciComm” Short Course:
100% Female; 100% PhD or other



CTS Roadblocks Addressed

- The public's lack of understanding how science works (progresses, evolves)
- The public's lack of understanding the science behind health-related policy recommendations
- The public's lack of trust in science
- These **roadblocks** result in a rise in:
 - misinformation
 - disinformation
 - lack of engagement in clinical science as participants
 - health inequities



Strategic Goals

Workforce Development Section of the UM1 (Element C1)

Goal 3. Enhance the CCTSI's workforce effectiveness by providing career development training in Teaming and Leading, Mentoring, and Communicating Research.

T32 Pre- and Post-Doctoral Trainee Grants

Goal: Develop trainee's ability to communicate effectively (oral and written) to diverse stakeholder groups.



Strategic Goals

Educational Objectives of the Short Course

1. Understand the importance (the why) of engaging with media

- Learning about different types of media; audience; how to “pitch” a story; developing and distilling your messages; providing constructive feedback

2. Learn how to develop and tell a “story” about your research, including 1 – 3 messages

3. Learn how to use social media effectively to communicate your message

Roadblocks addressed for all goals: public's lack of understanding how science works (progresses, evolves); The public's lack of understanding the science behind health-related policy recommendations; The public's lack of trust in science.



Health Equity Goals

The short course aims to educate the CCTSI research community to do the following:

1

**Proactively engage with patients and the public on health mis-
/disinformation**

2

Use technology/media platforms to share accurate health information with the public

3

Proactively address the public's questions



Year 1 Progress

Evaluation of program from summer 2021 through fall 2023:

- **230** have taken the course in total (July 21- Dec 23)
- 32% of evaluation respondents were under-represented in biomedical research

Key Takeaways:

Most participants were satisfied with the workshop series. The majority (83%) of respondents agreed that they would recommend the series to a friend or colleague.

In general, participants learned to:

- ✓ Keep the audience in mind
- ✓ Focus on the key message
- ✓ Eliminate the use of jargon
- ✓ Use of relatable examples
- ✓ Keep their messages clear and simple
- ✓ Consider unique circumstances when presenting virtually (such as lightning)

"[I intend to] speak to people more naturally, like I am telling a story to a friend rather than speaking about my research like I am at a conference."



Year 1 Progress

Evaluation of program from Summer 2021 through Fall 2023



Of evaluation respondents were **under-represented in biomedical research**

Institution (check all that apply)	Percent of Respondents
CU-Anschutz (n=46)	75%
Childrens Hospital (n=6)	10%
Colorado State (n=4)	7%
Veterans Affairs (n=3)	5%
CU-Denver (n=2)	3%
CU Hospital (n=2)	3%
All other (n=8)	13%



Year 1 Progress

Evaluation of program from Summer 2021 through Fall 2023



Agreed that they **anticipate applying concepts** from the workshop to their work/professional life ($n=73$)

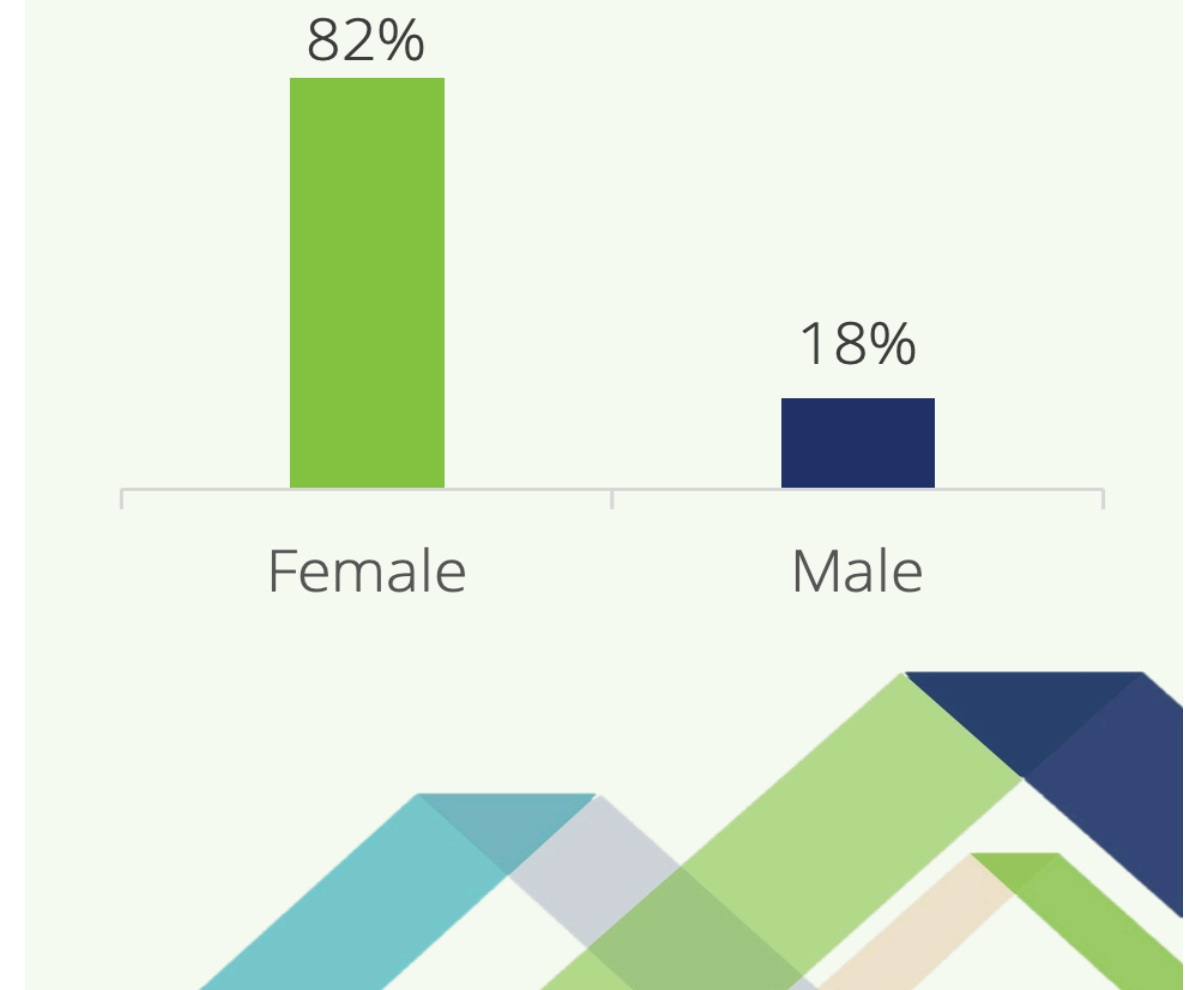


Agreed that **workshop content was the right balance** of presentations, practice, and breakout sessions ($n=73$)



Agreed that the workshop helped them understand **how to develop and deliver their message effectively** ($n=35$)

More than three-quarters of respondents were **female** ($n=50$)



Year 1 Progress

Evaluation of program from summer 2021 through fall 2023

Workshop 1. Communicating your message to the public

Respondents (n=70) reported increased confidence in all 8 areas evaluated

*The differences between pre- and post-workshop ratings were statistically significant ($p < 0.05$). Ratings were assessed on a 5-point scale where 1 is 'Not at all confident' and 5 is 'Very confident'



Year 1 Progress

Evaluation of program from summer 2021 through fall 2023

Workshop 2. Sharing your message and giving/receiving feedback

Respondents (n=64) reported increased confidence in all 7 areas evaluated

*The differences between pre- and post- workshop ratings were statistically significant ($p < 0.05$). Ratings were assessed on a 5-point scale where 1 is 'Not at all confident' and 5 is 'Very confident'

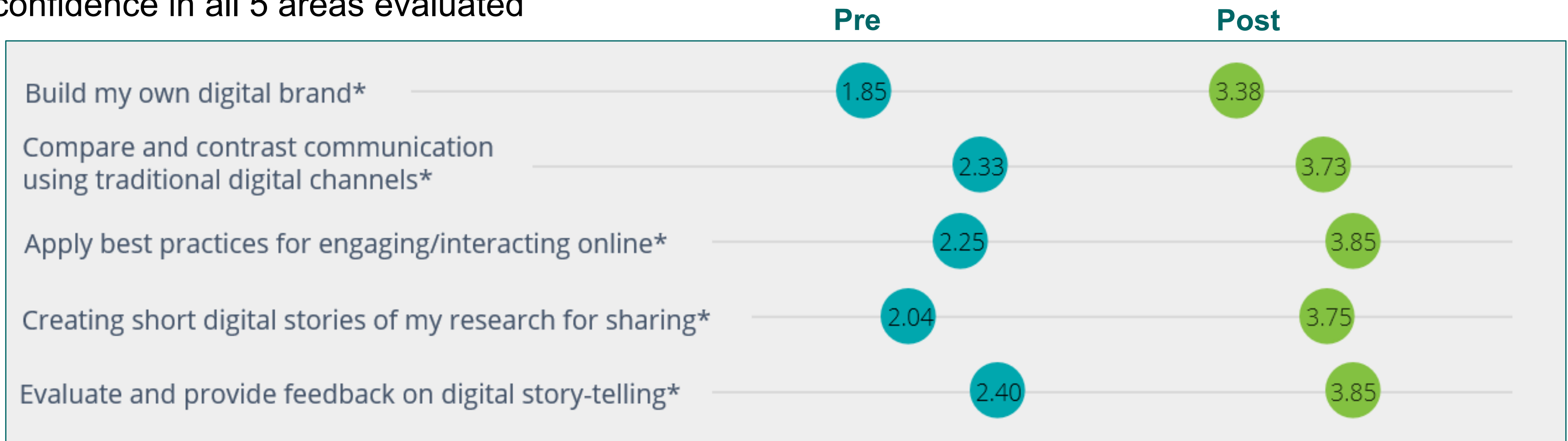


Year 1 Progress

Evaluation of program from summer 2021 through fall 2023

Workshop 3. Expanding your media horizons

Respondents (n=55) reported increased confidence in all 5 areas evaluated



*The differences between pre- and post- workshop ratings were statistically significant ($p < 0.05$). Ratings were assessed on a 5-point scale where 1 is 'Not at all confident' and 5 is 'Very confident'



Year 2 Plans

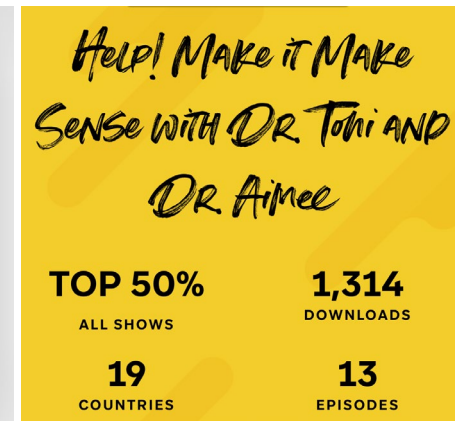
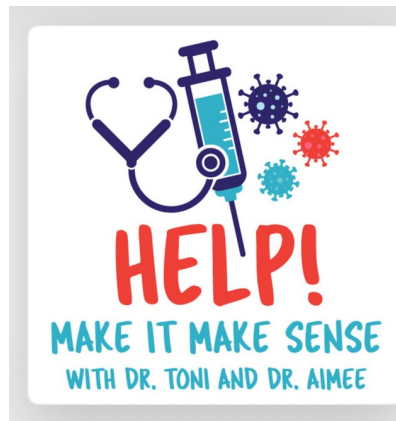
- Course offered 3 times per year
 - Continue on Zoom
- Starting in July 2024, course will have an updated curriculum, including newly developed web modules that can be self-completed, will include new and revised course content and readings
- Moving toward 'flipped classroom' model to create a learner-centered environment with active learning
- Update evaluation to reflect new curriculum and model



National Representation and D&I

- **Meyer:** CTSA Hub Communicators Committee
- **Bernard:** Editor of Research Topic in *Frontiers in Public Health: Public Health Education and Promotion*. ***Empowering Individuals: Promoting Health Literacy through Curriculum and Science Communication***

- **Bernard:**



THE CONVERSATION

Academic rigor, journalistic flair

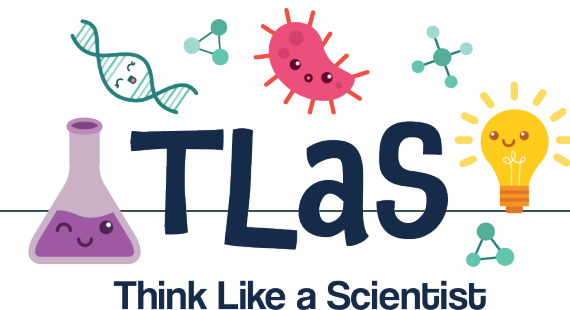
Immune health is all about balance – an immunologist explains why both too strong and too weak an immune response can lead to illness

By Aimee Pugh Bernard — November 20, 2023

Research Engagement Report. Reads as of 3/1/24 = 36,745

- **D&I**

- Submit manuscript to *Frontiers in Public Health*
- Publish the revised curriculum in CU Digital Collections (OER)
- Community outreach science program, *Think Like a Scientist (TLaS)*, founded by Bernard to fill a gap in science education in Aurora local elementary schools
 - TLaS is also offered in Cleveland, Ohio and Guam (Manelu')





Questions for EAC

- 1. Your thoughts on best practices/guidance from other hubs?**
- 2. Thoughts on new and different ways to teach researchers to engage with the public.**
- 3. Opportunities to collaborate with other hubs?**

