

# Finding your Audience & Communicating your Message



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If you've ever gotten a card like this...



...this session is for you!

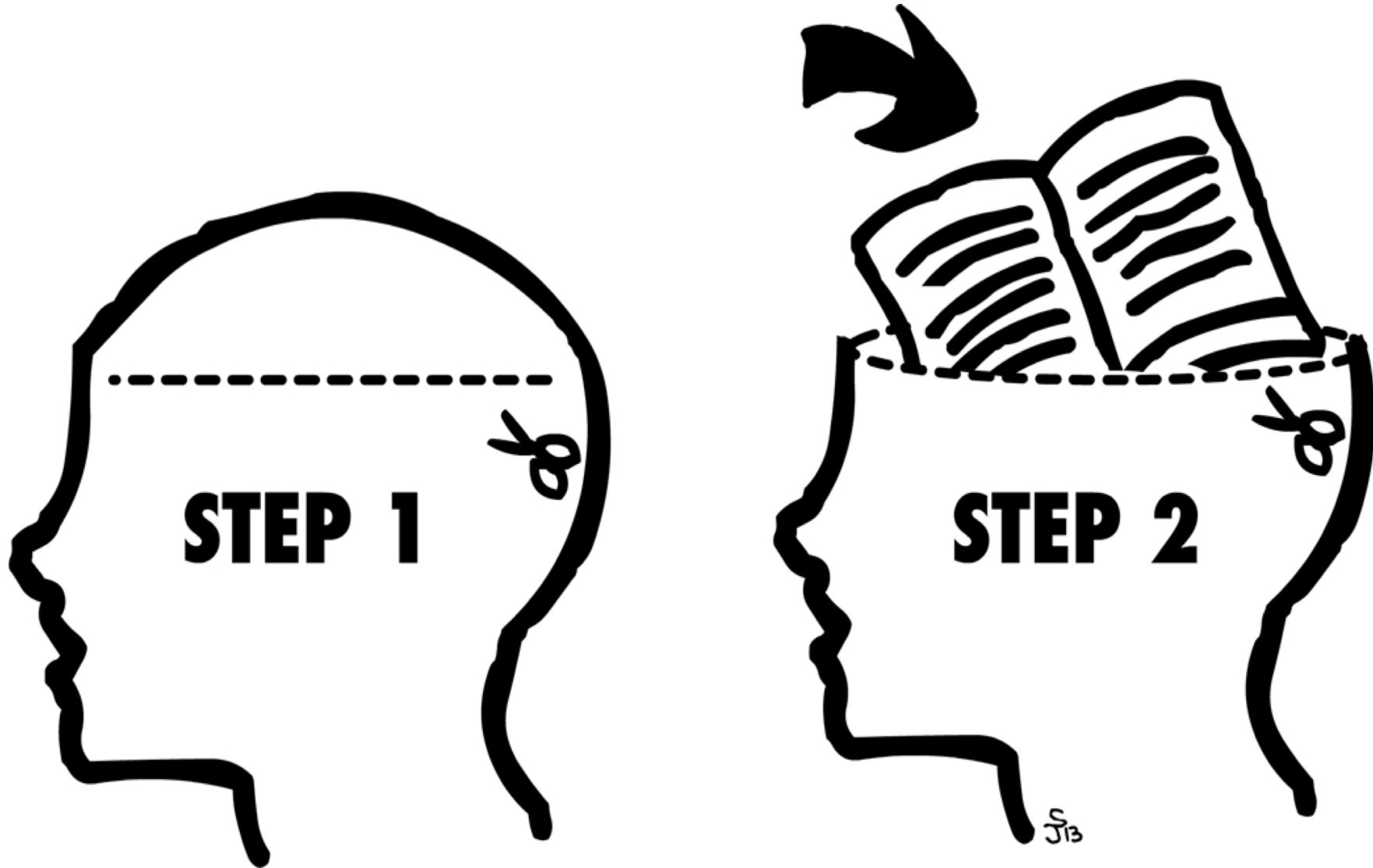


What concerns do you have when thinking about communicating about your work on your BC project?

What are some of the challenges?



# Why do people struggle to communicate their message?



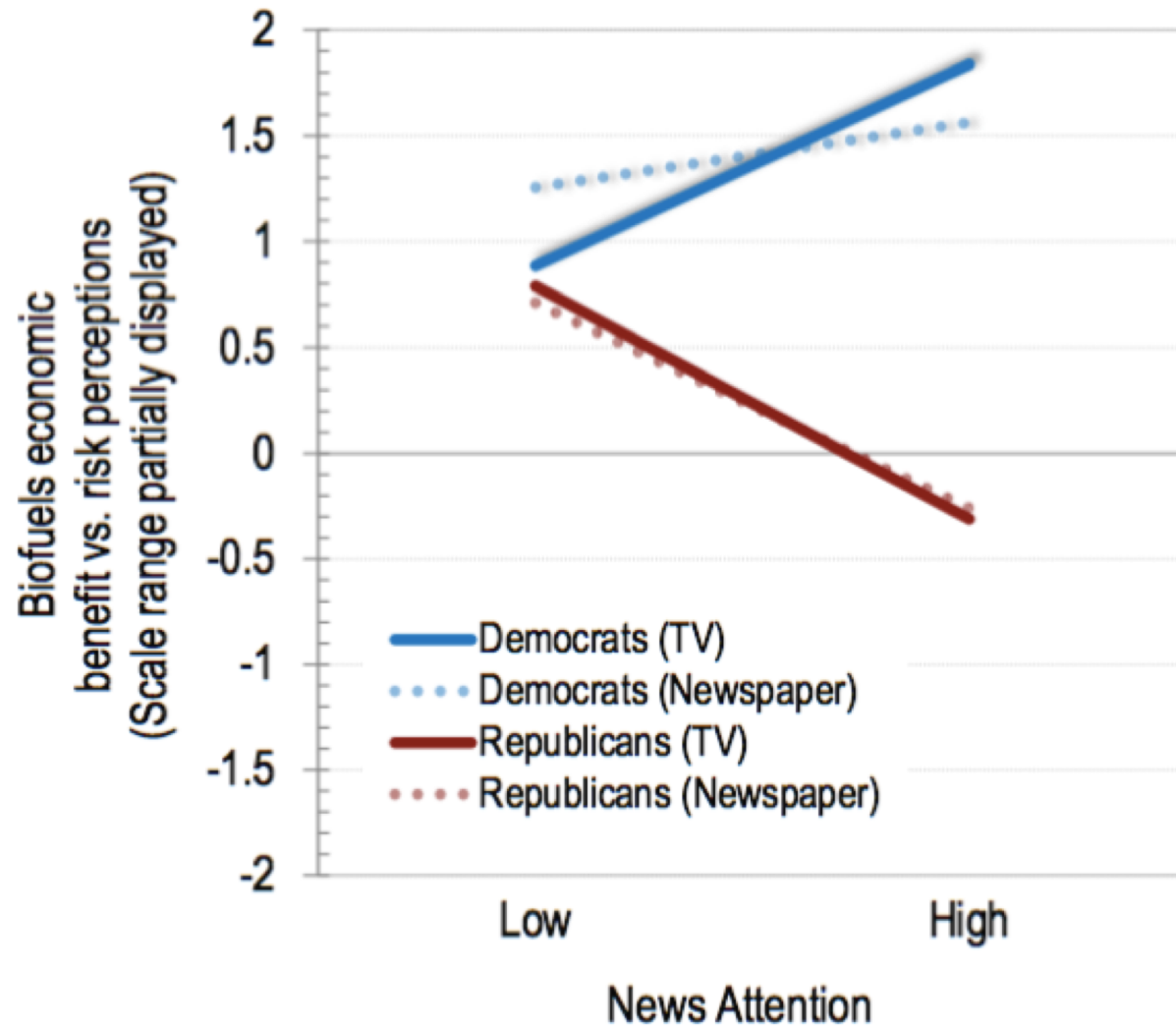
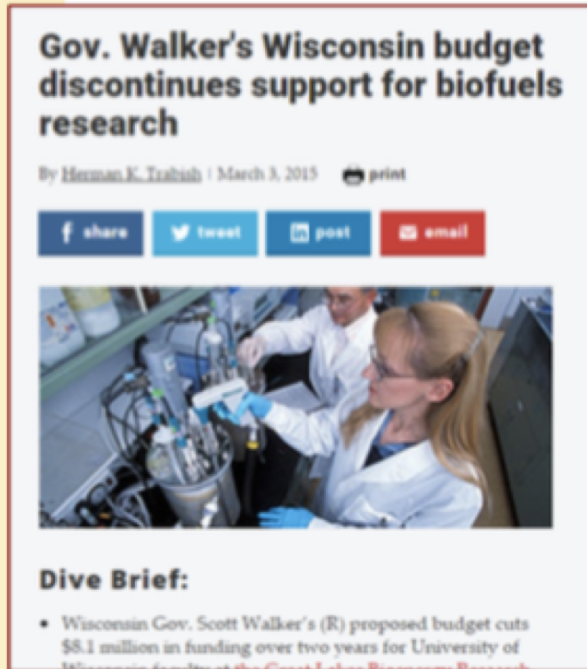
**More information**



**Greater understanding  
or acceptance**

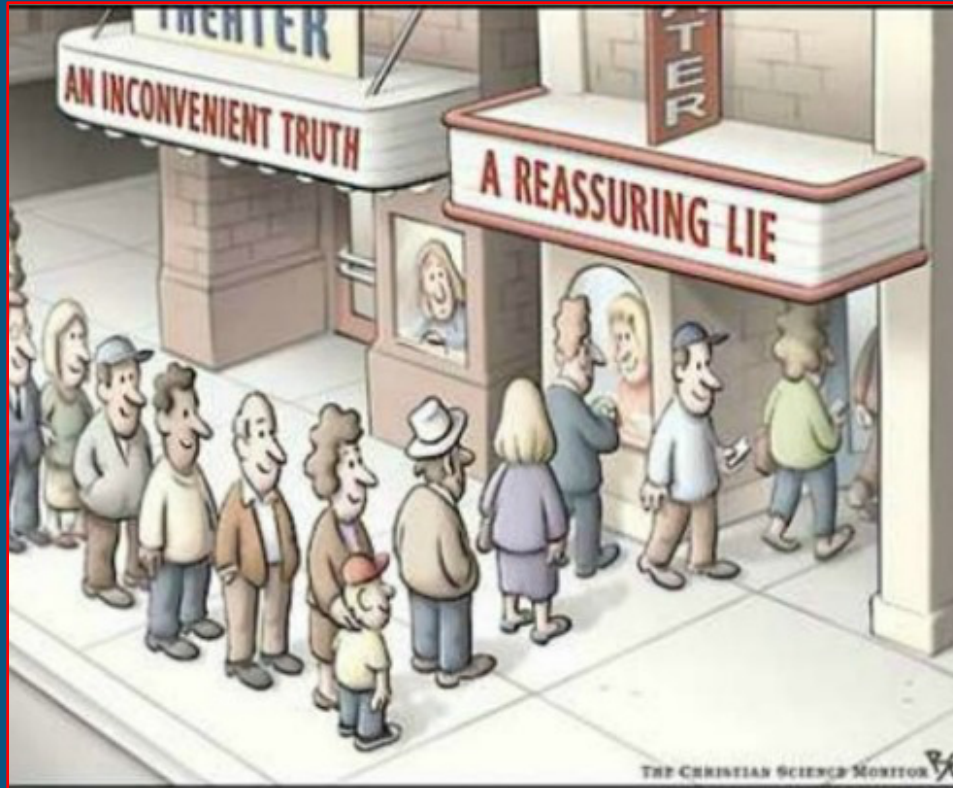


# People Don't Always Behave As Expected



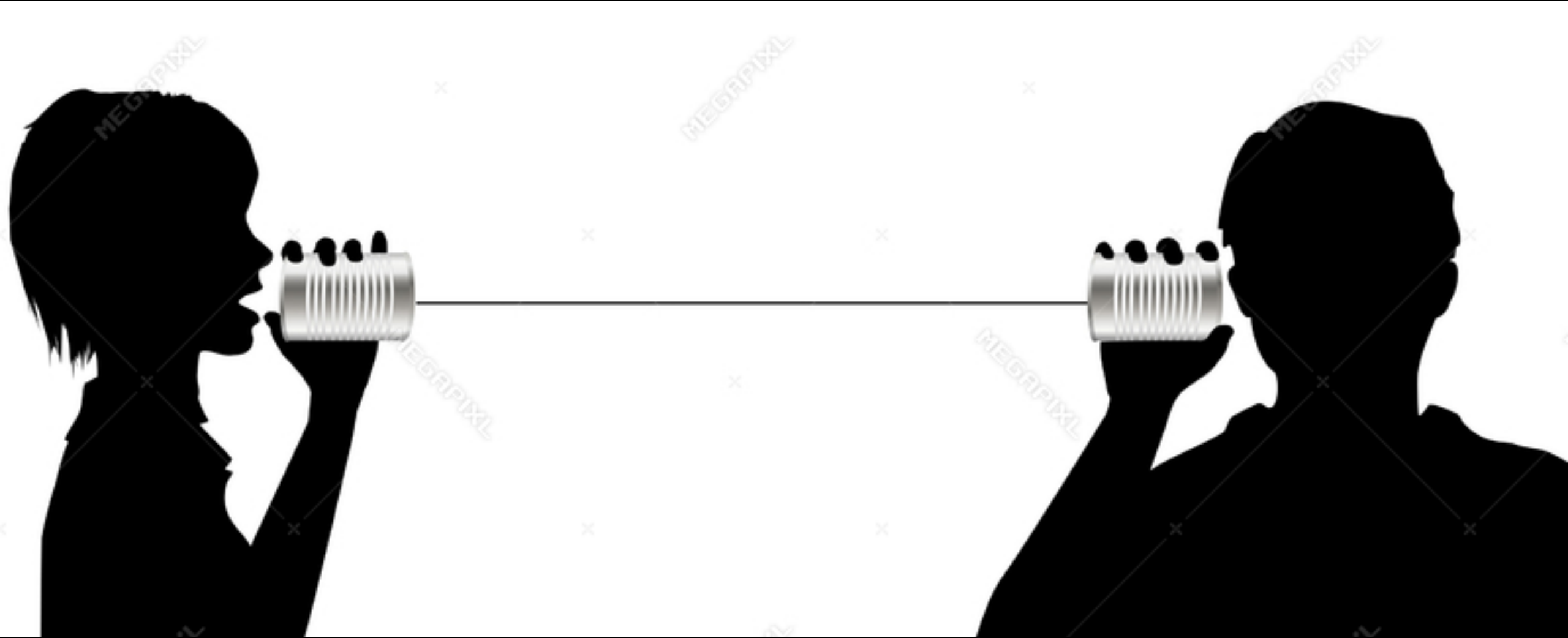
# Why Does This Happen?

## Confirmation Bias



- Confirm what they already believe, while ignoring contrary data
- Develop elaborate rationalizations to Justify beliefs that logic and evidence have disproved
- Respond defensively to contrary evidence, actively discrediting it

# What Else Can I Do...



## ... To Communicate Effectively?







# What Is Your MESSAGE?

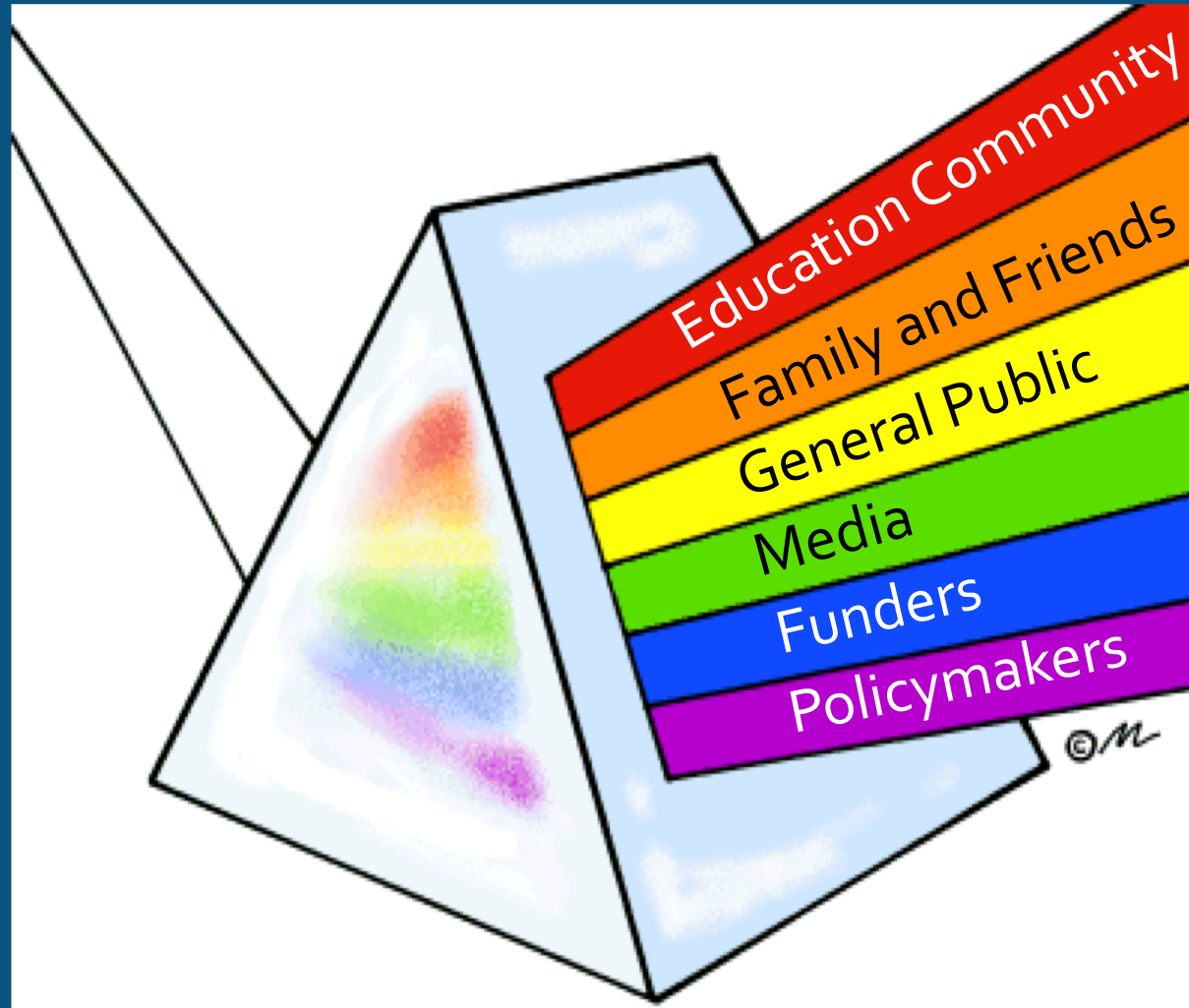


It should be...

- Easily understood
- Memorable
- Focused
- Framed to be relevant to your audience



# AUDIENCE - AUDIENCE - AUDIENCE !





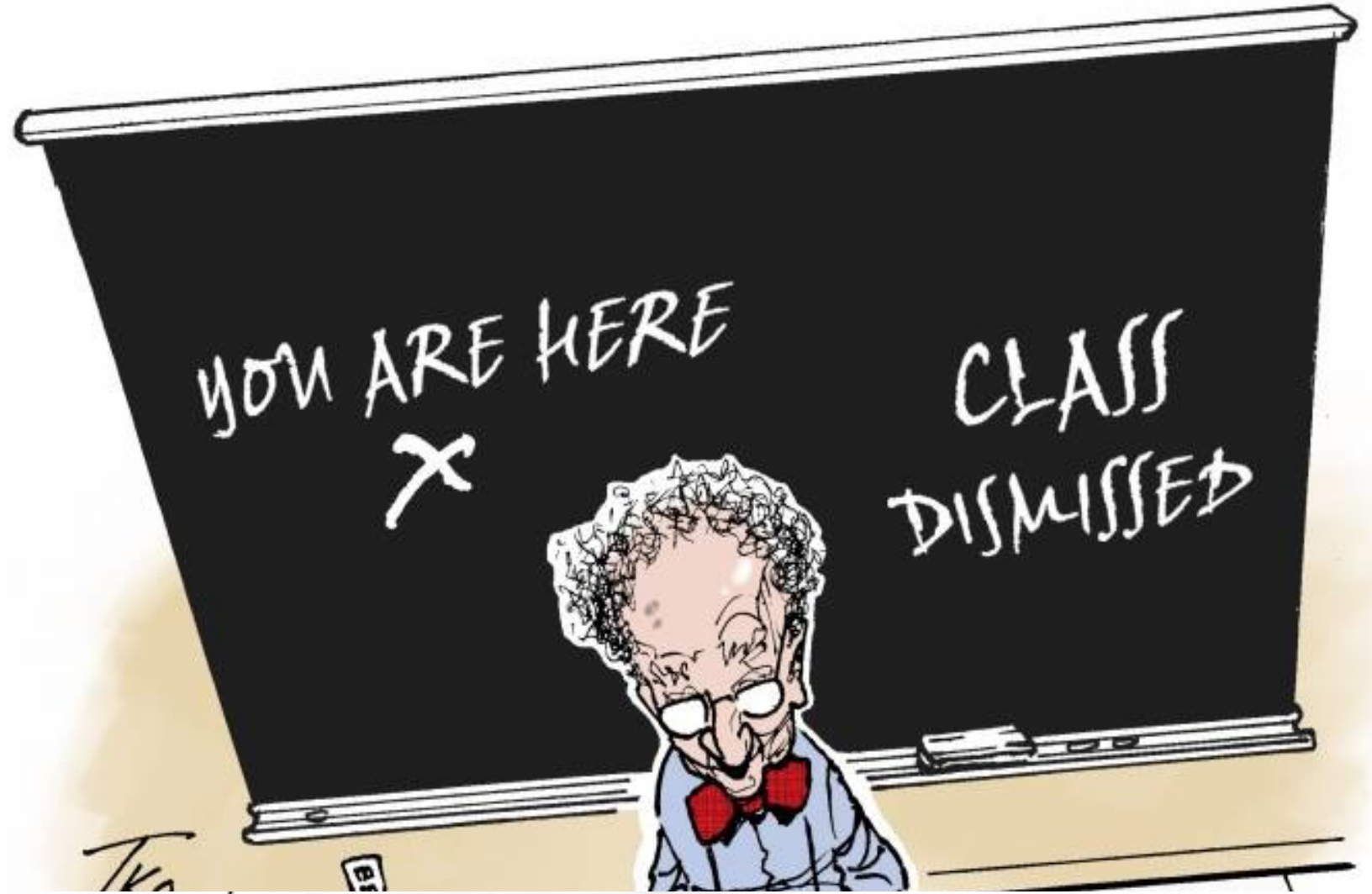
# Your Message... Pitched at Three Levels

In ONE SENTENCE, explain your BC project to:

- Level 1 – A colleague at a professional conference
- Level 2 – A Duke undergrad
- Level 3 – A 3<sup>rd</sup> grader



**Be Concise!**



*“Professor Horvath’s ‘Intro to Existentialism’ lecture was famously concise.”*

# Avoiding Jargon (i.e. talking like a real person)

**Law**

**Significant**

**Theory**

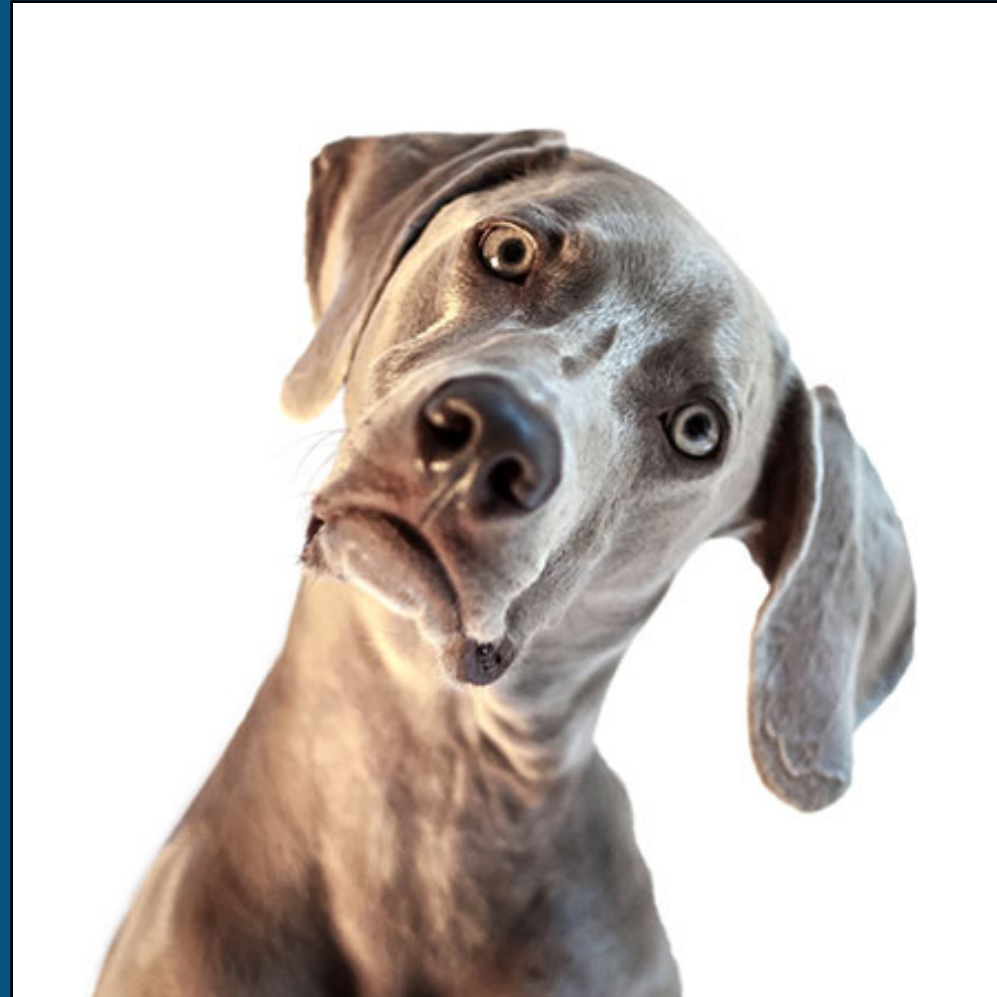


# Avoiding Jargon (i.e. talking like a real person)

To conduct a  
study that will  
help determine

Elucidated the  
mechanisms by  
which...

Foster  
interdisciplinary  
collaborations...



To study

Showed how

Build teams

# Simplify “Number Jargon”

47.65% ( $p < .0532$ ) = About half

32 million Americans = 1-in-10 Americans

“The largest  
dinosaurs had  
brains about 8 cm  
in diameter”

=

“The largest  
dinosaurs had brains  
about the size of a  
baseball”

# If you **MUST** use jargon...

- Keep it to a minimum
- Define it first, and then introduce the term
- Make sure the definition is provided the first time you use the term

But, mostly.....

**TRY TO AVOID JARGON!**

# HOW STORYTELLING AFFECTS THE BRAIN

## NEURAL COUPLING

A story activates parts in the brain that allows the listener to turn the story in to their own ideas and experience thanks to a process called neural coupling.

## MIRRORING

Listeners will not only experience the similar brain activity to each other, but also to the speaker.



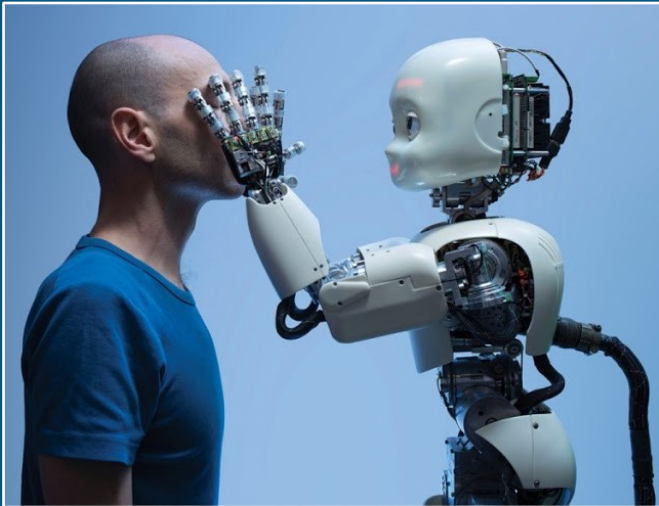
## DOPAMINE

The brain releases dopamine into the system when it experiences an emotionally-charged event, making it easier to remember and with greater accuracy.

## CORTEX ACTIVITY

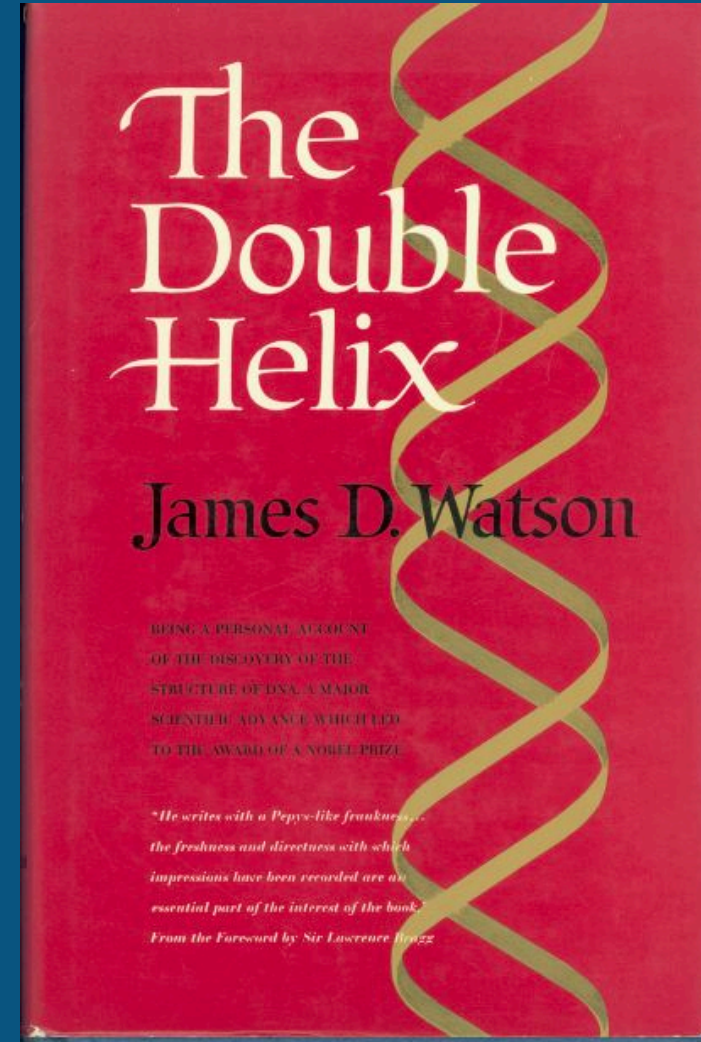
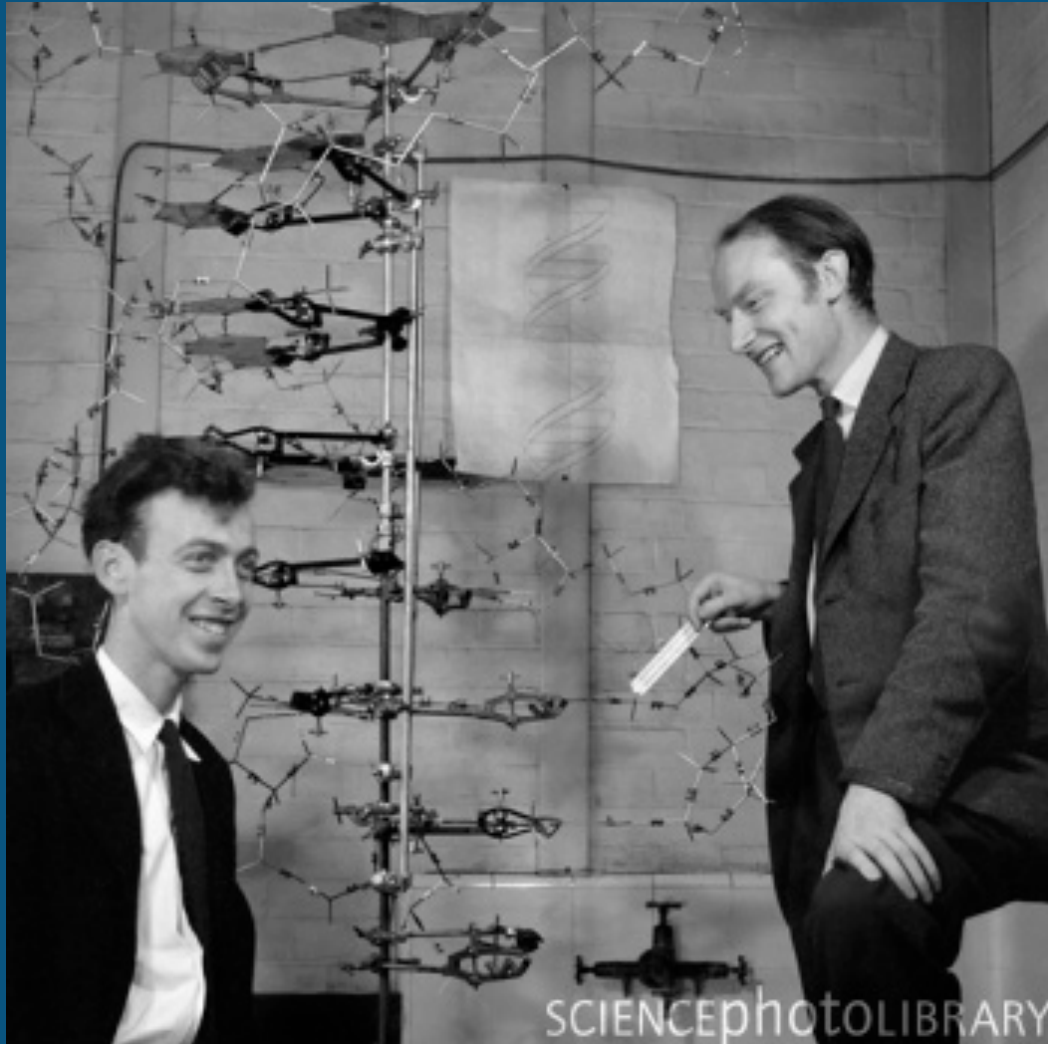
When processing facts, two areas of the brain are activated (Broca's and Wernicke's area). A well-told story can engage many additional areas, including the motor cortex, sensory cortex and frontal cortex.

# A Few Things That You Might Find in a Great Research Story...





# Narrative Arc





# Outrageous Methodology



Barry Marshall

# Compelling Characters

After unlocking the secrets of DNA, the prize-winning biochemist traded in his centrifuge for a life of wine, women, and surf. Besides, babes really dig a Nobel.

## Is Kary Mullis God?

(Or just the big kahuna?)

By Emily Yoffe

**K**ARY B. MULLIS SITS in his beachfront apartment in La Jolla, surrounded by his tools of seduction. There are bottles of wine, surfboards, a guitar ("Women go crazy when you play the guitar for them"), and the most potent and rare of his offerings: a newly minted medal the size of his palm, his very own Nobel prize. He won it for chemistry last year by looking at how life reproduces itself and coming up with something more efficient. It is, perhaps, the perfect invention from a currently unemployed surfer who seems intent on reproducing himself with every woman he meets.

He no longer has to chase women; they pursue him. They send eight-by-ten glossies, they write letters, they leave longing messages on his answering machine. They are simply acting out a desire coded deep within the species: to mate with someone of superior genes. Since Mullis understands our genetic

mechanisms so well, the attention hardly surprises him. "Why wouldn't they?" he asks, then offers a self-description. "I'm forty-nine and I act a lot younger than I am. Someone who roller-skates and surfs and does science and writes and plays guitar and sings, he can't be all bad." He leaves out a few attributes. He also has a well-muscled build, a strong, sun-etched face, clear turquoise eyes, and grayish hair he constantly messes in a boyish gesture.

Mullis does his best to convince me that he is the happiest man in America. For one thing, there's money. Since 1993 he has been awarded almost \$1 million in prizes—the \$450,000 Japan prize, that country's supreme scientific honor, and his \$412,500 share of the Nobel, which he split with Canadian chemist Michael Smith, who won for another invention—which means he no longer has to cobble together a living as a biotechnology consultant. For another, there's fame. An entire *Nightline* was recently devoted to a reverential profile of him. And the recognition comes after years of what he considered intolerable



**Nobel savages:** Mullis's peers thought he was too much of a wild man to win the prize.



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## A Scientist's 20-Year Quest To Defeat Dengue Fever

by JOE PALCA



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Morning Edition

[8 min 58 sec]

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Nine minutes on NPR!

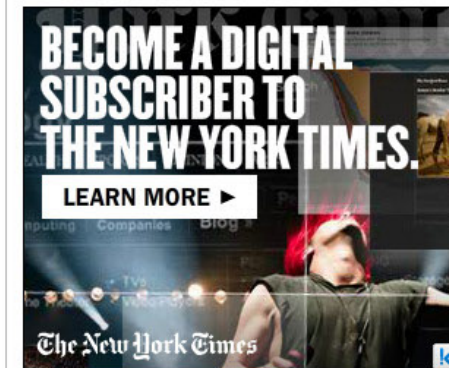
Benjamin Arthur for NPR

Scott O'Neill wants to rid the world of dengue fever by infecting mosquitoes with bacteria so they can't carry the virus that causes the disease.

**KRULWICH** wonders...   
AN NPR SCIENCE BLOG

- Millions And Billions And Billiards And Milliards
- Weekend Special: This Blog Now Has An Anthem

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**Be Definitive!**



# A Few More Tips...



- Make it personal
- Use analogies and metaphors
- Use humor and/or drama
- Provide statistics
- Hook them with something surprising or counterintuitive
- Tap in to your passion for the topic





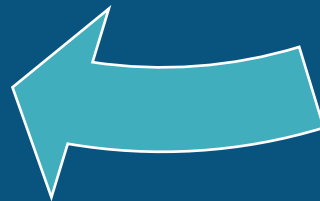
# Research Outputs

Who Is Your  
Audience?

What Is Your  
Communication  
Goal?

What Is Your  
Medium?

What Is Your  
Message?



# Who Is Your Audience?



- General public
- Some defined subset of GP
- Community stakeholders
- Students/teachers/parents
- Faculty/administration
- The media
- Policy makers
- Patients (and their family/friends)
- Clinicians
- Funders (or potential funders)

# What Is Your Communication Goal?



- To inform
- To educate
- To train
- To guide
- To persuade
- To advocate
- To excite
- To recruit
- To transform



# What Is Your MESSAGE?



It should be...

- Easily understood
- Memorable
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- Framed to be relevant to your audience



# What Is Your Medium?



- Research papers, reports, white papers, research summaries
- Pamphlets, brochures, infographics
- Public fora (e.g., science cafés)
- Online chats/AMAs
- Blogs
- Podcasts
- OpEds/commentaries
- Policy briefs/policy memos
- Social media campaigns
- Other?

# Spend about 10 minutes sketching out a plan (i.e., a pitch) for your BC research output(s)...

Ask yourself the following questions:

- Why is this the best output for your work?
- Are you missing important stakeholders by focusing too narrowly on a certain audience (e.g., policy makers)?
- What are the assumptions you're making about your team's research by the type of output you're focusing on?
- Can you expand or shift your audience by considering another form of communication or by prioritizing another audience/stakeholder?

The goal isn't to get you to decommit from a path you're planning to take, but to get you to think creatively and expansively about who you want to talk to and why.

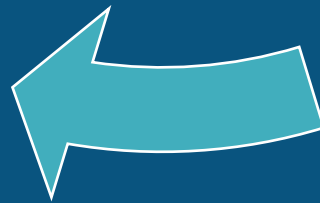
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# In small groups, spend about 20 minutes sharing your plan and giving/getting feedback

Ask each other:

- What are you doing and why does it matter?
- Who are you talking to and how are you talking to them?
- What do you actually want to say?
- Are you choosing the best media to share your message (e.g., does it make sense for your policy memo to also be translated into an op-ed)?

The desired result of this activity is an action plan for how to best communicate your team's research through the desired output(s), and to really understand why your team is focused on a particular medium, audience or set of stakeholders.



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