

Where Science & Art Meet, Society Benefits

KIETS Climate Leaders Fall Symposium

Sept 29, 2023

Ariana N. Eily, PhD

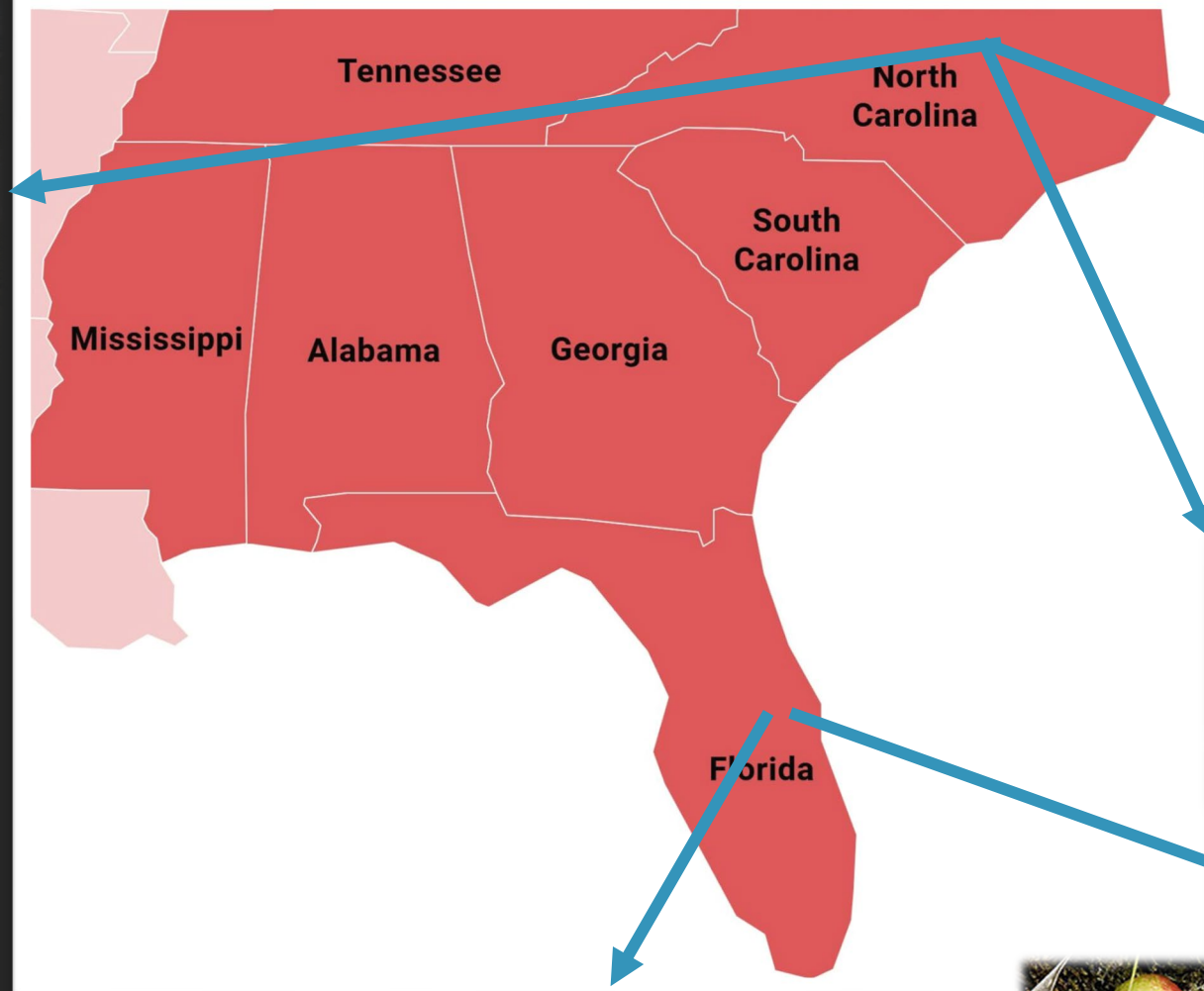
Biology Dept

Elon University



THE ART OF A SCIENTIST

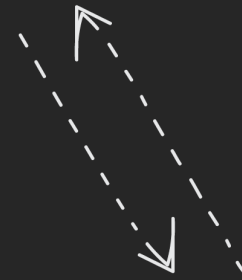
SCIENCE HAS A BEAUTY ALL ITS OWN.



NORTH CAROLINA PFAS Testing Network

What does a biology prof & art director have to say about climate change?

Scientists &
Researchers

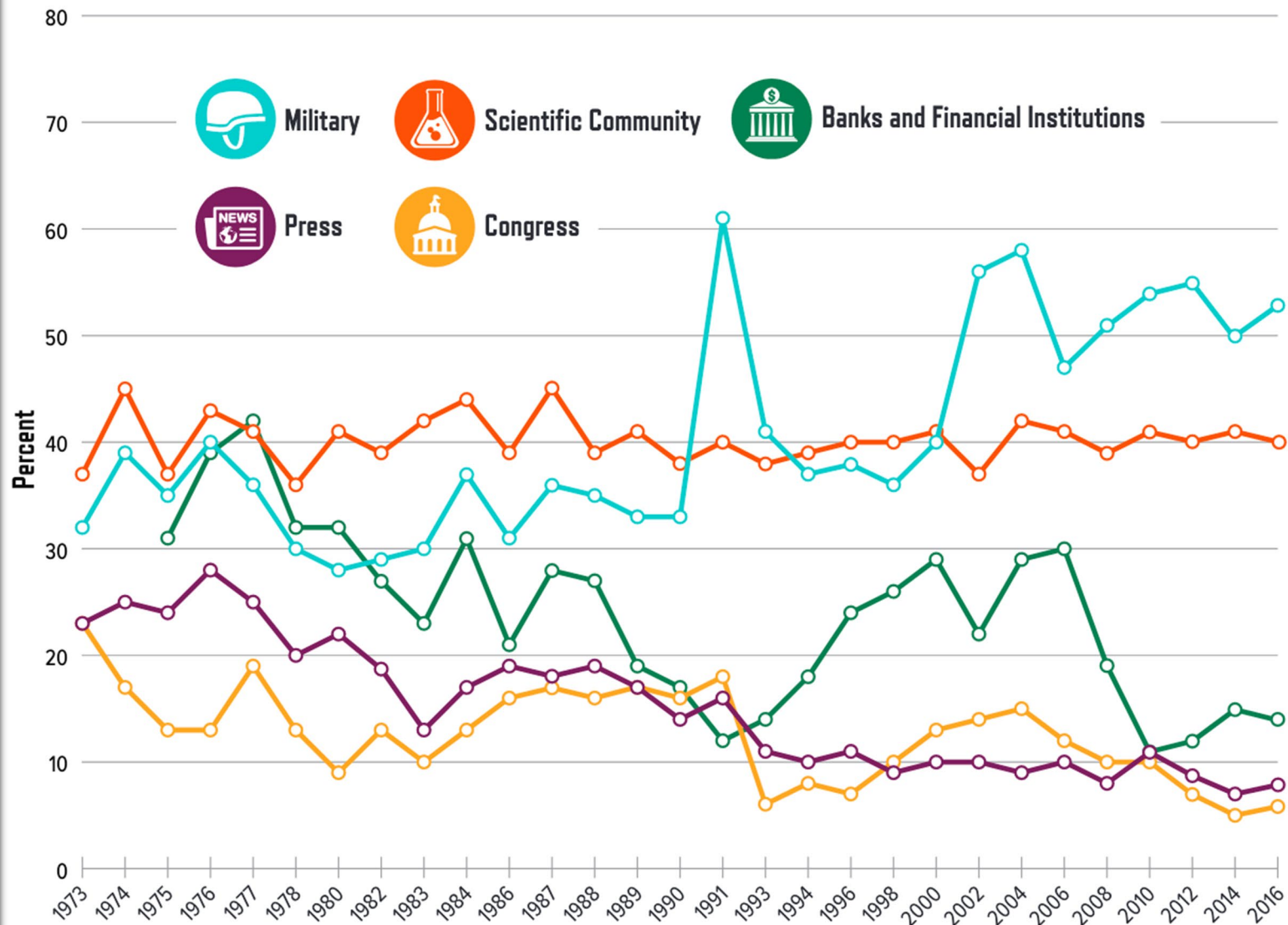


Scientific
Community



the "Public"

Percentage of U.S. Adults with a “Great Deal” of Confidence in the Leaders of the Following Institutions:

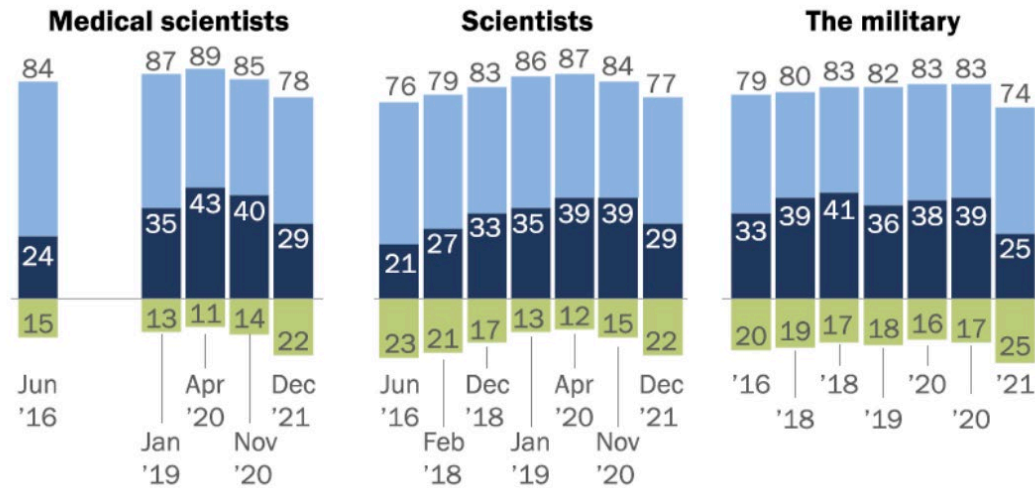


SOURCE: NORC at the University of Chicago, *General Social Survey* (1973–2016).

Public confidence in scientists and medical scientists has declined over the last year

% of U.S. adults who have ____ of confidence in the following groups to act in the best interests of the public

● A great deal ● A fair amount ● Not too much/No confidence at all



MicrobesInfect
@MicrobesInfect

Anti-science extremism in America: escalating & globalizing.

The last 5 years has seen a sharp rise in anti-science rhetoric in the US, especially from the political far right, mostly focused on **#Vaccines** & anti-**#COVID19** prevention approaches.

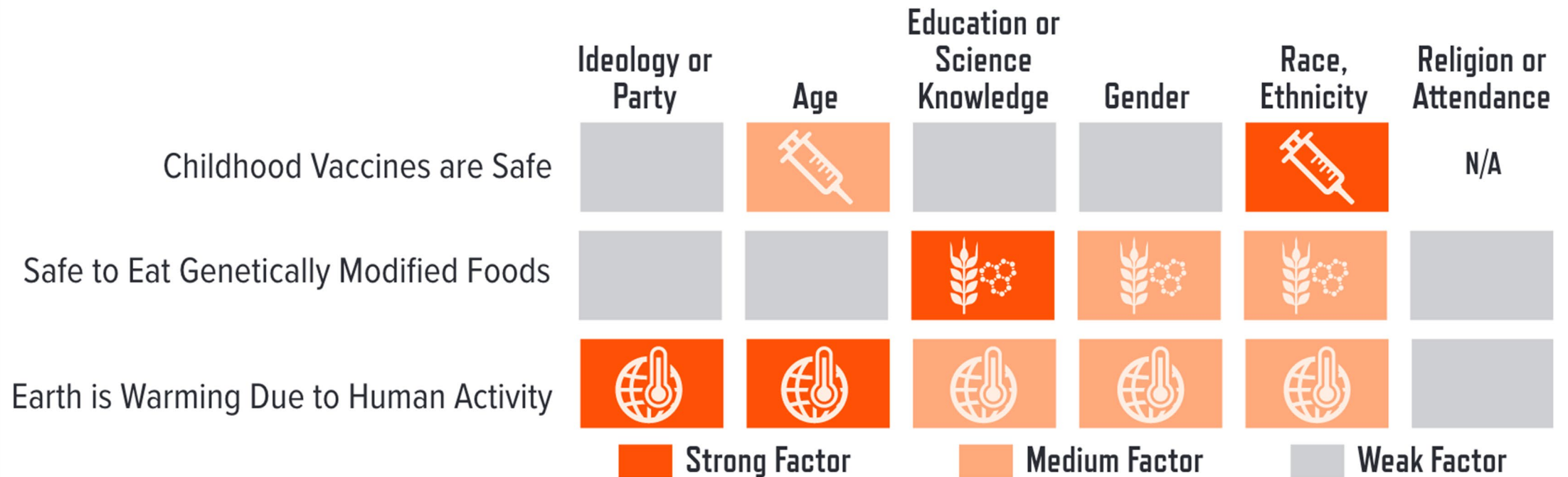
[sciencedirect.com/science/articl...](https://www.sciencedirect.com/science/article/...)



8:12 PM · Nov 14, 2020 · Twitter Web App

People's Perspectives on Science Vary

Relative Strength and Statistical Significance of Factors Influencing Views on Controversial Issues



SOURCE: Cary Funk and Lee Rainie, *Americans, Politics and Science Issues*, Pew Research Center (July 1, 2015; survey conducted August 2014).

Knowledge

Values

Beliefs



Priorities

Necessities

Experience

Identity

“It's not about scientists delivering information to the public, it's about scientists forming a *relationship* with the public.”

@thescientish

Science and Art connect us.



Now Opening: the Art of a Scientist

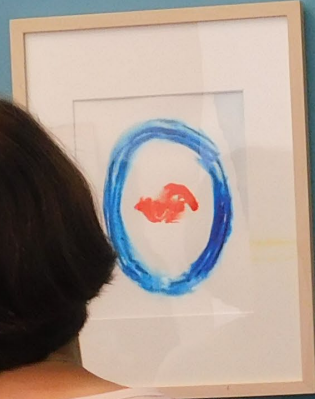
Connect scientists & artists
Create public engagement
Promote conversation





Small informational text card on the wall.

Small informational text card on the wall.



Art can also help us connect to more abstract science.



Concerns with AI
& its creation



Art can convey both science's side of the story, and people's personal experience.



**FOREVER
CHEMICALS**

NORTH CAROLINA'S TOXIC TAP WATER

A TODD HAYNES FILM

MARK
RUFFALO

ANNE
HATHAWAY

TIM
ROBBINS

BILL
CAMP

VICTOR
GARBER

AND
BILL
PULLMAN

DARK WATERS

ONE OF THE DEADLIEST COVER-UPS IN AMERICAN HISTORY

“A PERFECT FILM.
RIVETING, POWERFUL
AND IMPORTANT”

OBSERVER

“MARK RUFFALO’S
BEST PERFORMANCE YET”

HOLLYWOOD NEWS





The beauty of North Carolina's lakes and rivers is being threatened by a group of human-made chemicals, known as PFAS, including GenX.



To understand the extent of PFAS contamination across the state, the North Carolina General Assembly funded a statewide research study.



This study is a collaboration among universities to document the presence of PFAS and understand its impacts on the environment and our health.

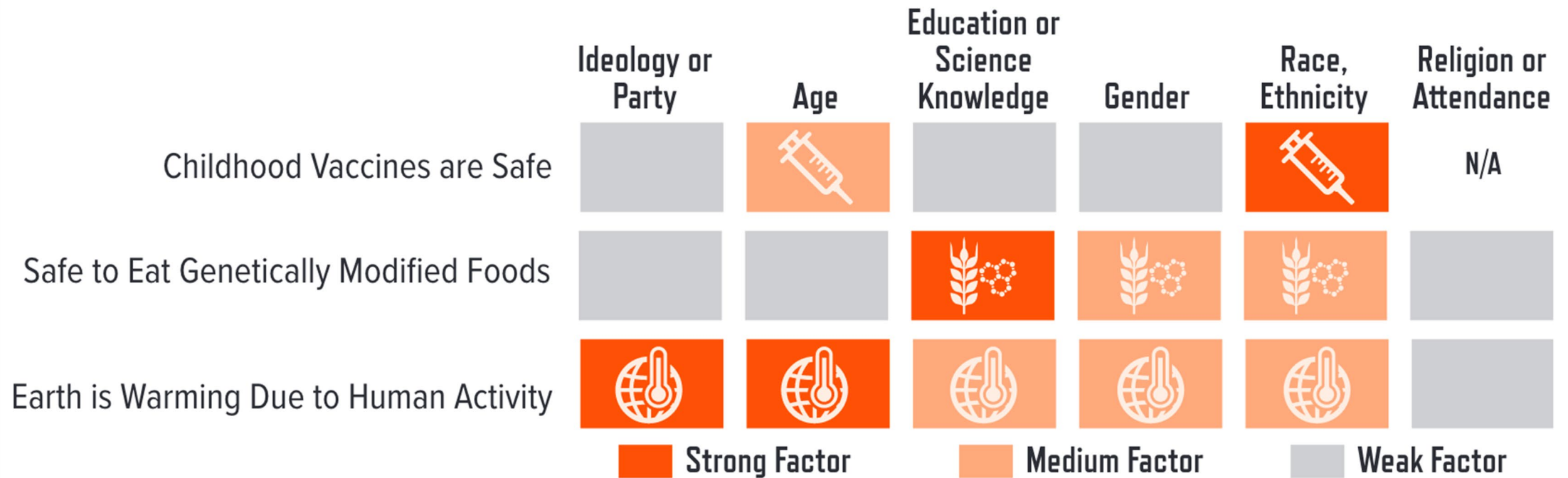
These are complex issues that
need many perspectives to solve.



Climate Change is a complex
problem too.

How the Public Sees Climate Change

Relative Strength and Statistical Significance of Factors Influencing Views on Controversial Issues



SOURCE: Cary Funk and Lee Rainie, *Americans, Politics and Science Issues*, Pew Research Center (July 1, 2015; survey conducted August 2014).

People are a Central Part to
Solving Climate Change &
Understanding Its Impact

People's Experiences Show Us the Impact of Climate Change



People's Concerns Show Us the Impact of Its Solutions



How can art-science
collaborations help us with climate
change?

MELINDA MARTINEZ

GREENHOUSE GASES IN GHOST FORESTS

We can talk
about saltwater
intrusion's
impact on the
land.





+ INGRID ERICKSON + GREG MERRILL

NORTHERN FUR SEAL

INGRID ERICKSON:

I enjoy working with and learning from scientists. In this series I have created "specimens," such as this Northern Fur Seal, for an imagined Natural History collection. Works range in size from half an inch to over 6 feet. I used fishing line to suspend certain pieces and help them hold their shape.

This piece is part of a new body of work made during the pandemic. My MUSEUM series features a new body of 3-dimensional hand-cut paper sculptures, over 40 of which are on view on my website.

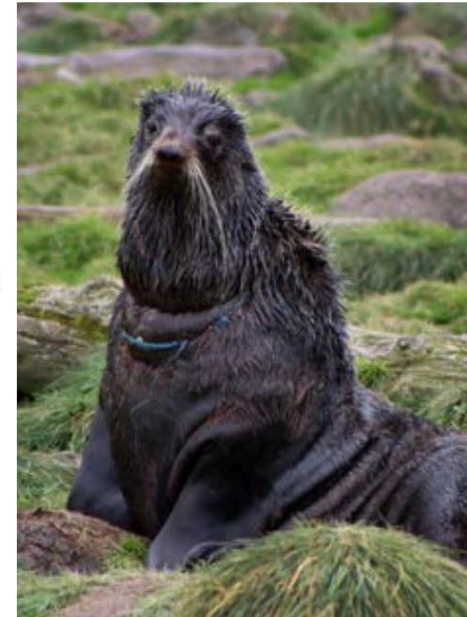
[CLICK HERE TO VIEW THE MUSEUM SERIES](#)

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GREG MERRILL:

This northern fur seal on the Pribilof Islands of Alaska is entangled in marine debris. My current research is aimed at identifying the effects of plastic pollution on polar marine mammals. Fur seals serve as an important subsistence resource to Alaska natives and understanding the link between plastic pollution, its effects on seal populations, and ultimately the impact on the people who depend on the fur seals is a huge knowledge gap worth bridging.

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Developing
new eco-
friendly
materials



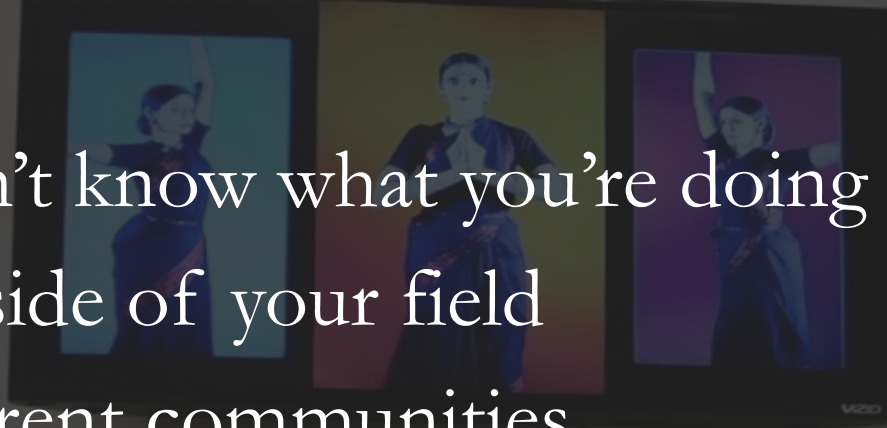
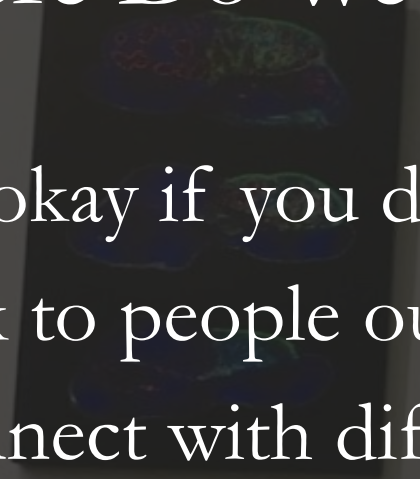
And what possible solutions look like, such as this one focused on rewilding.



How Can We Create These
Collaborations?

Where Do We Start?

- It's okay if you don't know what you're doing
- Talk to people outside of your field
- Connect with different communities
- Develop a common goal
- Be open-minded & supportive



Thanks for listening!
Questions?

