

# Getting Being Wrong Right

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Martha Acosta, Ed.D.



**DMV SPRINGFIELD**

DRIVER LICENSE  
C4043243

CLASS: C

HOMER J. SIMPSON  
742 EVERGREEN TERRACE  
SPRINGFIELD, NT 49007


EXPIRES 05-12-96

SEX: M  
HT: 6'

HAIR: NONE  
WT: 240

EYES: BLUE  
DOB 05-12-56

*Homer J. Simpson*  
07/27/92 503/ 201 FD/92






**PREMISE 1: All living things need water**

**PREMISE 2: Roses need water**

**THEREFORE: Roses are living things**

① Start presenting to display the poll results on this slide.



All insects need oxygen  
Mice need oxygen  
Therefore, mice are insects

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Source: Estimating the reproducibility of psychological science, *Science*




More than half of  
psychological experiments  
with significant statistical  
effects are not  
reproducible...

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Source: Estimating the reproducibility of psychological science, *Science*





...and two thirds  
of medical  
studies are  
ultimately  
refuted.

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Source: Why scientific studies are so often wrong: the streetlight effect, *Discover*



$H_0 : \mu = \mu_0 \rightarrow$  Null hypothesis

We can only disprove that we are entirely wrong

slido




**In one word, describe how you feel when you get something wrong.**

① Start presenting to display the poll results on this slide.





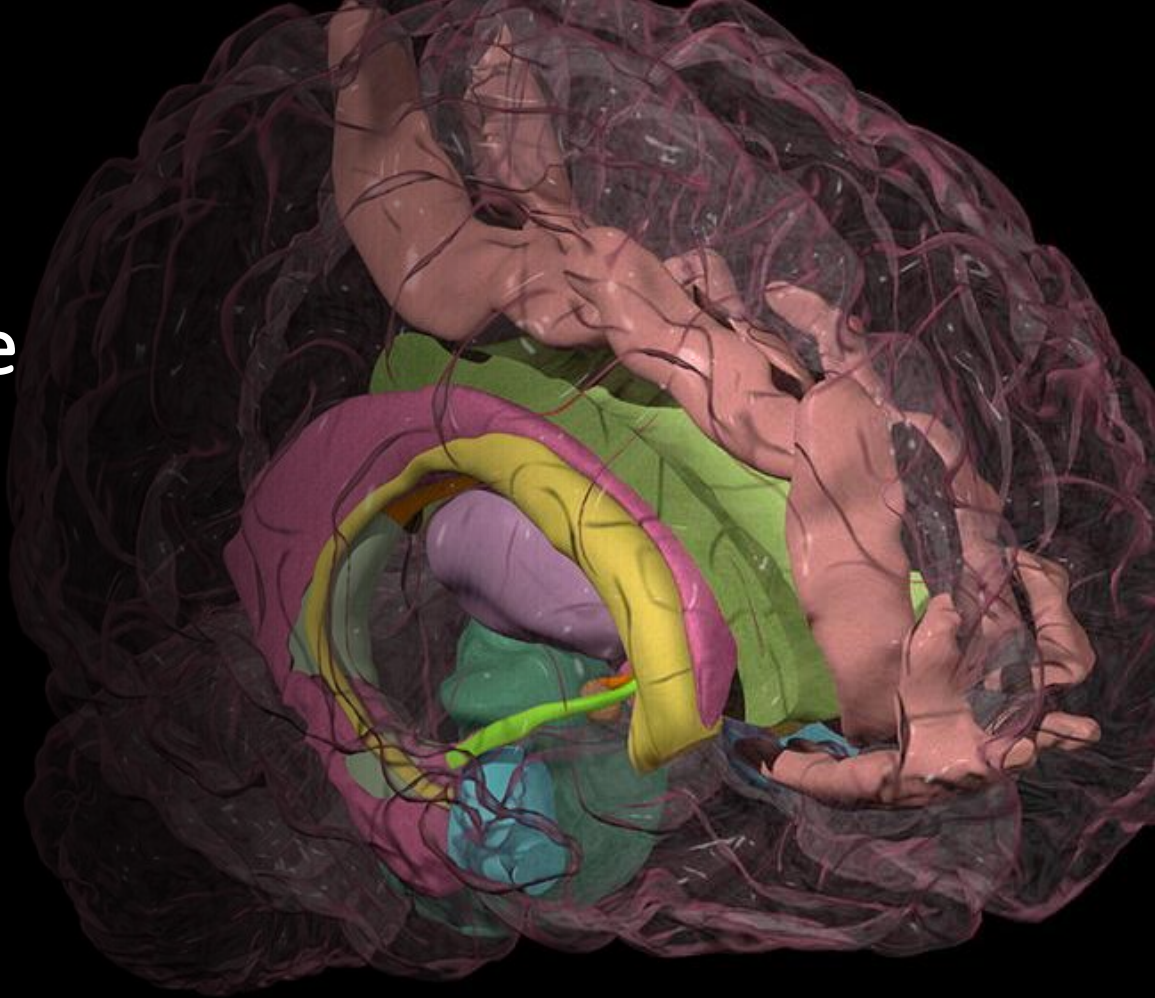
Blame is an ego defense against fear of failure



Students learn more  
from tests when  
they get the  
answers wrong.

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Source: The Pluses of Getting It Wrong, *Scientific American*



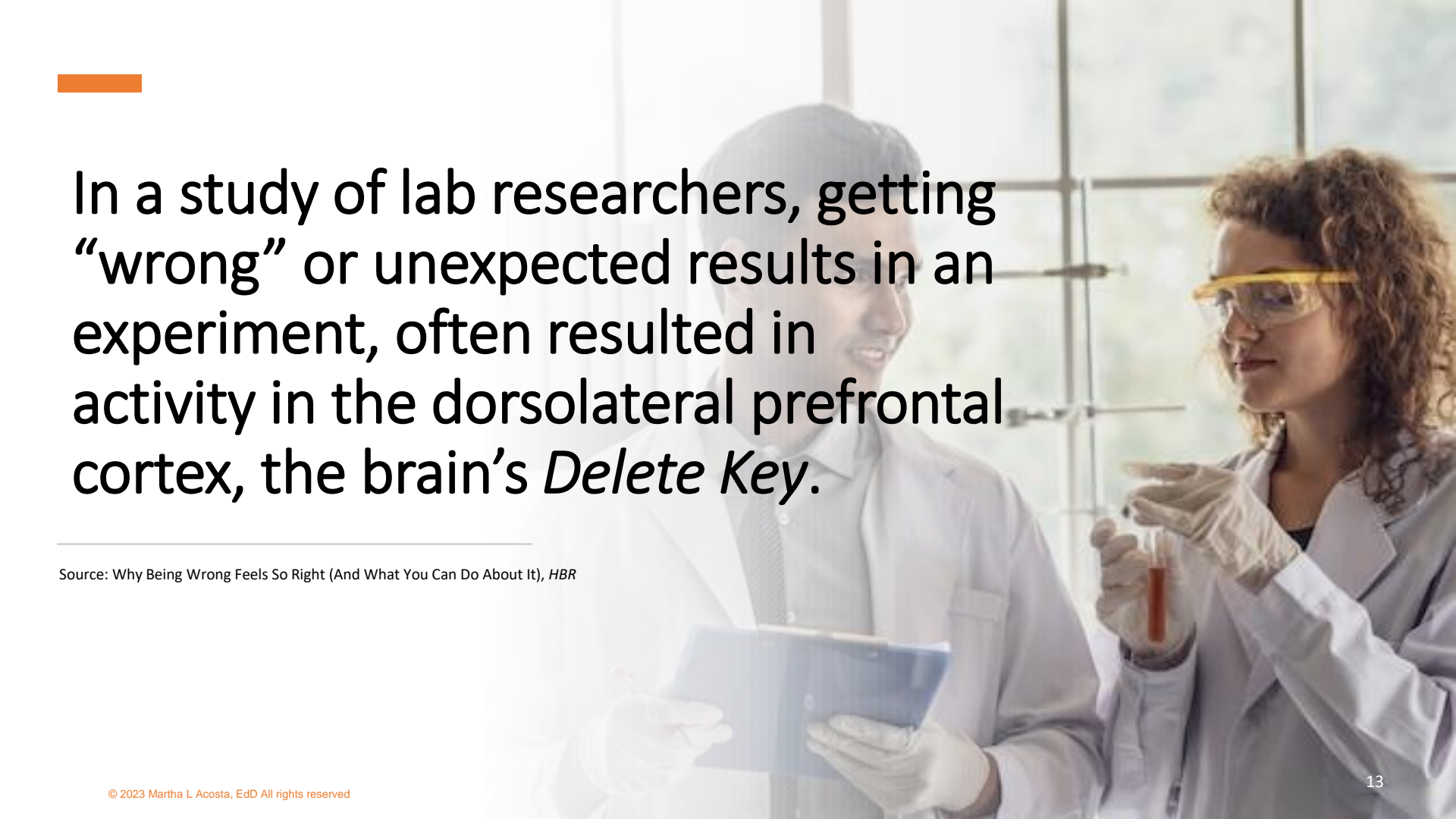


Failure is the occurrence of the unexpected, unintended, or unwanted





Don't confuse bad outcomes with failure



In a study of lab researchers, getting “wrong” or unexpected results in an experiment, often resulted in activity in the dorsolateral prefrontal cortex, the brain’s *Delete Key*.

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Source: Why Being Wrong Feels So Right (And What You Can Do About It), *HBR*



Whenever you act on a decision, you are experimenting





Get comfortable with being uncomfortable



Make a failure resume

slido



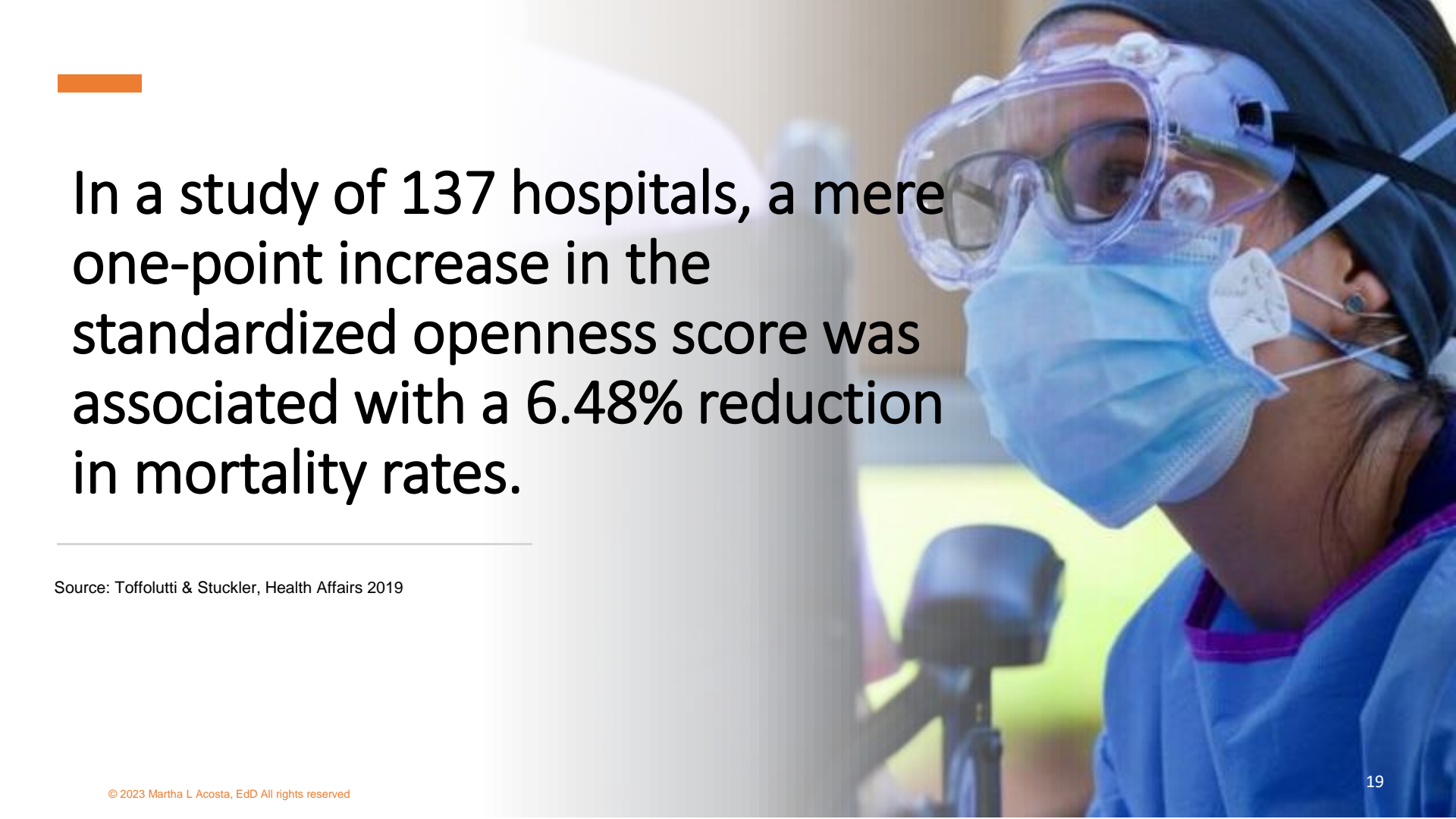
**What is something you have failed at?**

① Start presenting to display the poll results on this slide.



JIAJIANG

Condition yourself to being wrong

A close-up, profile view of a healthcare worker wearing extensive personal protective equipment (PPE). They are wearing a blue surgical cap, large clear safety goggles, a blue surgical mask covering their nose and mouth, and blue gloves. They are looking down, possibly at a patient or a piece of equipment. The background is blurred, showing a clinical setting.

In a study of 137 hospitals, a mere one-point increase in the standardized openness score was associated with a 6.48% reduction in mortality rates.

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Source: Toffolutti & Stuckler, Health Affairs 2019





Safety should be less “No! Don’t” and more “Yes! And...”





Seek out bad news and scan for change



Challenge assumptions and construct competing models



Curiosity is a risk that saves lives

September 1



# SAFETY CAPACITY

Leadership Practices for Failing Safely

MARTHA ACOSTA



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