

Maria Baker

Academic Squabble

This is my talk.

I like to start with a joke.

Why are geese terrible drivers?

Because they honk all the time.

Today I'm going to talk about
Academic Squabble

Academic Squabble is a card game

Academic Squabble teaches about
science

About Nobel Prizes and citations and paradigm shifts

Kids need to learn about science so
they can be better grown-ups when
they grow up

We need to learn about scientists
because scientists made many things
we now use

And the scientists were really great
because they helped the world

If a kid wants to become a scientist
they need to know what it's like to be
a scientist

Scientists like to argue

And that's true.
Scientists do like to argue!

Scientists read other scientists' papers
and sometimes they talk about them,
that's called a citation

Sometimes they get really jealous

A paradigm is how scientists think
about their fields

In a paradigm shift, Nobel Prizes don't
count anymore

Here's the game

First you shuffle the cards up

Which I cannot do because I don't
know how to shuffle

Then you deal the cards in piles of 8


Because that's fair. Each player gets 8.

You look at the cards and pick a card to
play

Let's say I pick Art Graesser and Chico picks Jonas Salk

Arthur Graesser

14k

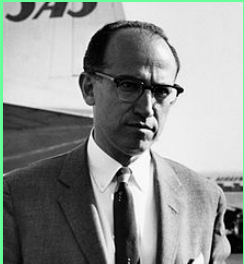


**TEAM
CS
PSYCHOLOGY**

Invented AutoTutor
Studied discourse comprehension

Jonas Salk


3k

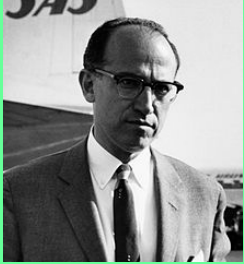


**TEAM
BIOMED**

Invented polio vaccine


There's no nobel prizes so the one with more citations is the winner. And the one with more citations is Art Graesser. So I win!

Arthur Graesser	
	14k
TEAM CS PSYCHOLOGY	
Invented AutoTutor Studied discourse comprehension	

Jonas Salk	
	3k
TEAM BIOMED	
Invented polio vaccine	

Let's say Chico picks Alexander Fleming. Alexander Fleming only has 5 thousand citations but he has a Nobel Prize so he wins

Arthur Graesser




14k

**TEAM
CS
PSYCHOLOGY**

Invented AutoTutor
Studied discourse comprehension

Alexander Fleming




5k

**TEAM
BIOMED**


Discovered Penicillin

But if I pick Marie Curie, she has two nobel prizes so she wins.

Marie Curie




0k



**TEAM
PHYSICS**

Discovered radioactivity
Pioneered medical radiation therapy

Alexander Fleming





5k





**TEAM
BIOMED**

Discovered Penicillin

Yay! Marie Curie is my favorite scientist of all time.


Marie Curie	
	Ok
	TEAM PHYSICS
Discovered radioactivity Pioneered medical radiation therapy	

She invented radiation therapy.


Marie Curie	
	Ok
	TEAM PHYSICS
Discovered radioactivity Pioneered medical radiation therapy	

Let's say Chico picked Erwin Schroedinger and I picked Saul Perlmutter

Saul Perlmutter




16k



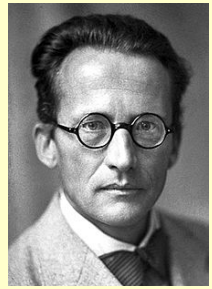
**TEAM
PHYSICS**

Proved universe is expanding

Erwin Schrodinger



10k




**TEAM
PHYSICS**


Proposed "Schrodinger's Cat"

They're both the same color so they're
in the same field – Fizziks

Saul Perlmutter




16k




**TEAM
PHYSICS**

Proved universe is expanding

Erwin Schrodinger



10k



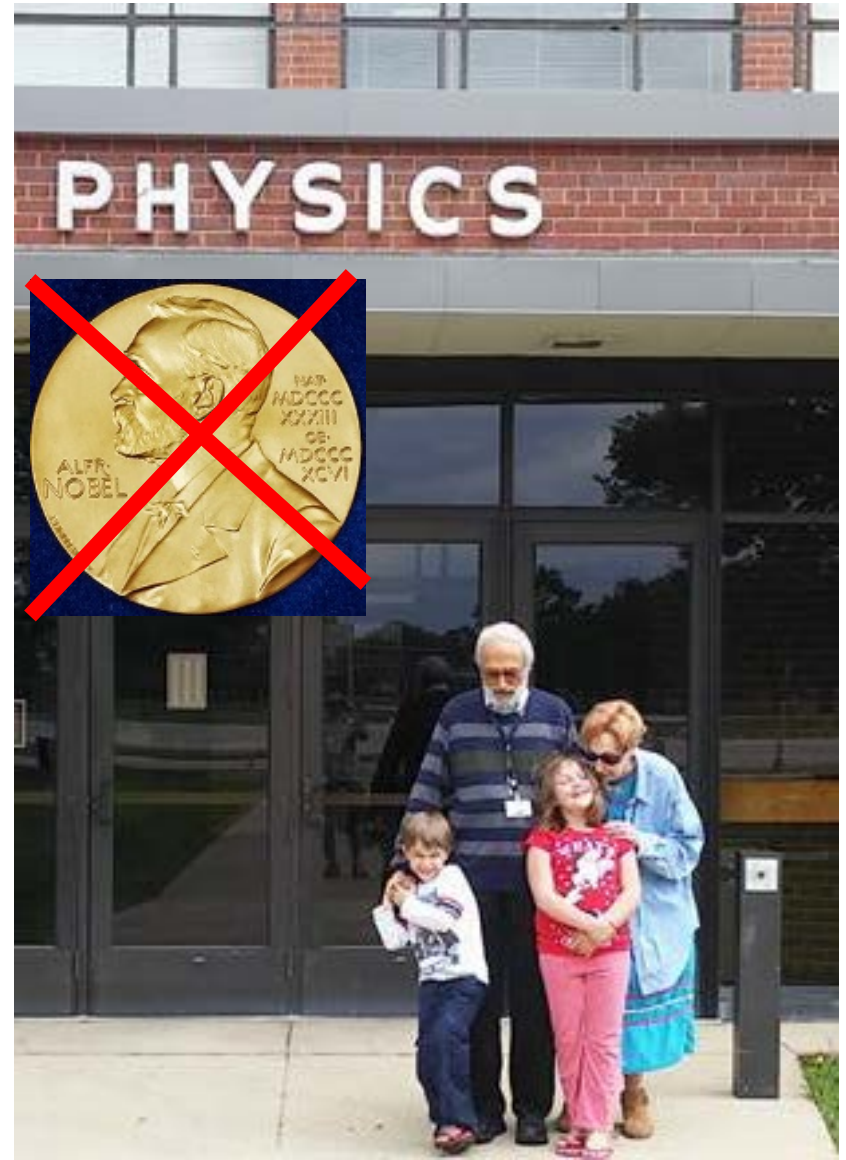
**TEAM
PHYSICS**

Proposed "Schrodinger's Cat"

My grandpa is a fizzisist




But he doesn't have a nobel prize




The one with the most citations would win. But they're the same color

Saul Perlmutter




16k




**TEAM
PHYSICS**

Proved universe is expanding

Erwin Schrodinger



10k



**TEAM
PHYSICS**

Proposed "Schrodinger's Cat"

So we yell “Academic Squabble”! Because they argue.

My theory is the best!

6k




**TEAM
PHYSICS**

Proved universe is expanding

(Note: A Nobel Prize medal is partially visible on the left side of the card.)

No, my theory is the best!

10k




**TEAM
PHYSICS**

Proposed “Schrodinger’s Cat”


(Note: A Nobel Prize medal is partially visible on the left side of the card.)

And we play another card

Saul Perlmutter




16k




**TEAM
PHYSICS**

Proved universe is expanding

Erwin Schrodinger



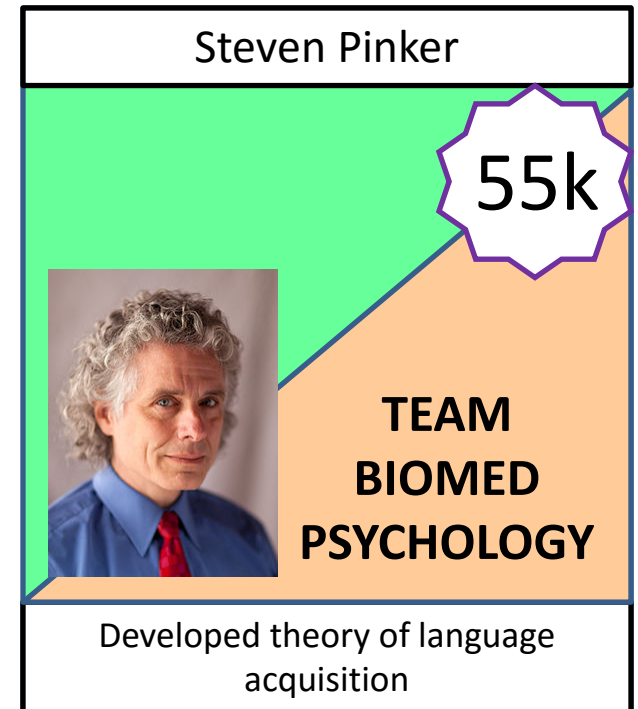
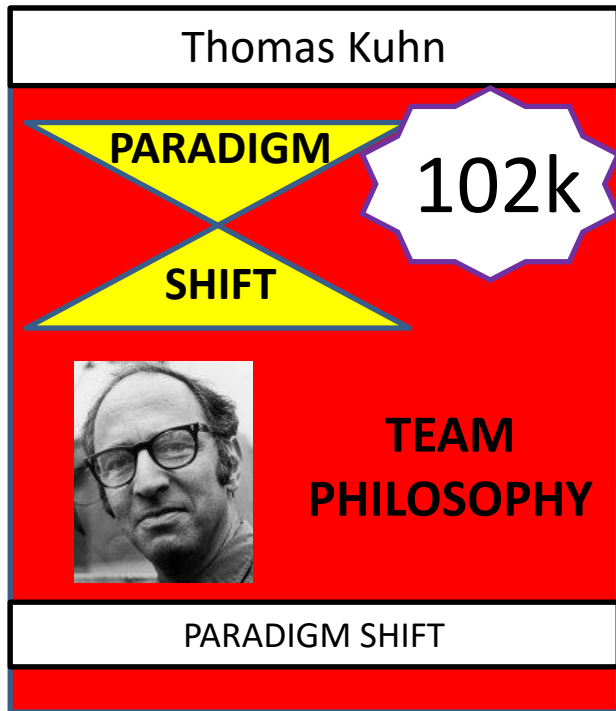
10k



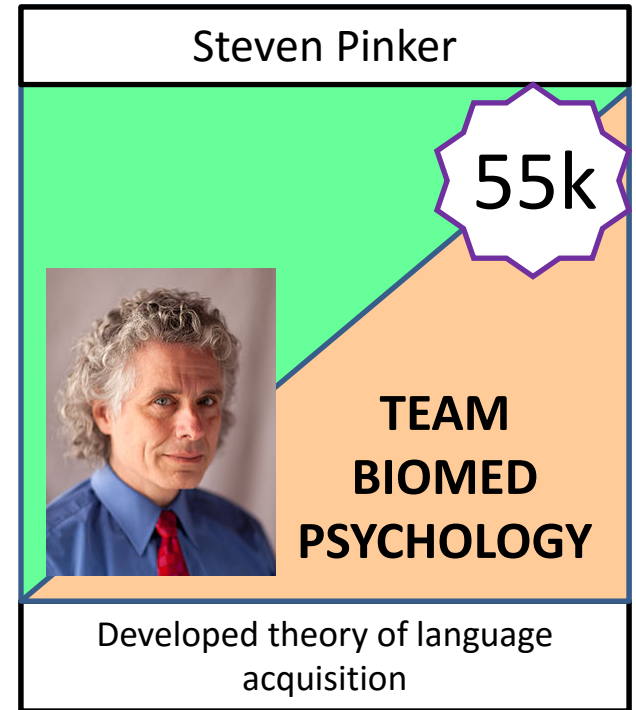
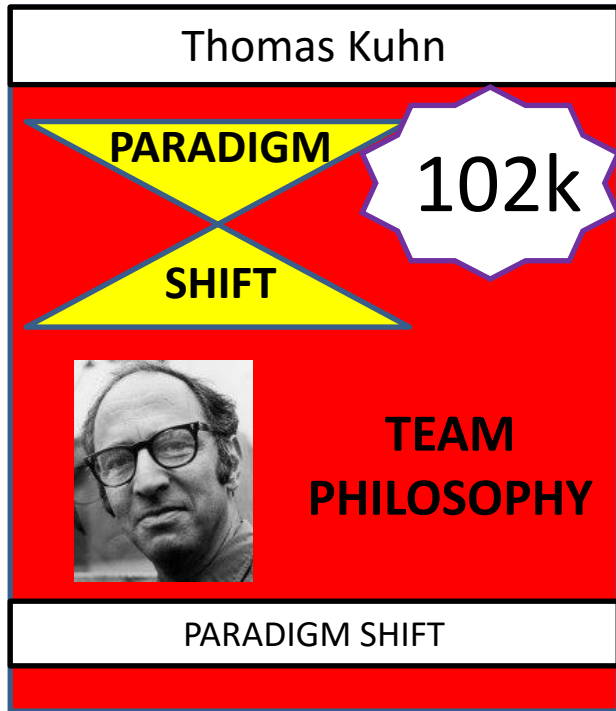
**TEAM
PHYSICS**

Proposed "Schrodinger's Cat"

Let's say Chico picks Thomas Kuhn and I pick Steven Pinker



The person who put down Thomas Kuhn says “Paradigm Shift!”



And then you play again and the person with the smallest citations wins

Grace Hopper

Ok



TEAM
CS

Invented compiler
Coined term "debugging"

Marie Curie

Ok



TEAM
PHYSICS

Discovered radioactivity
Pioneered medical radiation therapy

Sheldon Cooper

Ok



TEAM
PHYSICS

Bazinga

Imagine they thought Grace Hopper wouldn't win. But she would!

Grace Hopper

Ok



TEAM
CS

Invented compiler
Coined term "debugging"

Marie Curie

Ok



TEAM
PHYSICS

Discovered radioactivity
Pioneered medical radiation therapy

Sheldon Cooper




Ok



TEAM
PHYSICS

Bazinga

Marie Curie wins normally and in Paradigm Shifts. She's the Strongest Card! Yeah!

Marie Curie	
	
	TEAM PHYSICS
Discovered radioactivity Pioneered medical radiation therapy	

You win when someone finally loses all
their cards

548 people have downloaded
Academic Squabble

We are planning to do research. We
are just getting started.

The IRB said we can do research on Academic Squabble

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INFORMED CONSENT TEMPLATE

DESCRIPTION OF THE RESEARCH: Your child is invited to participate in a research study on a game that teaches about scientists and the customs of science. Your child will be asked to play a game about scientists called Academic Squabble. Your child will be given a short verbal pre-test about the material learned in the game. Then they will be taught how to play. Then they will play the game six times. After each game, they will be read a brief paragraph about scientists. Finally, they will be given a short verbal post-test about the material learned in the game. No data will be collected except for the verbal pre-test and post-test. The research will be conducted by the Principal Investigator. The research will be conducted at a location of your choice.

RISKS AND BENEFITS: The risks and possible benefits associated with this study are minimal. There are minimal risks to participating in this activity, comparable to those seen in recreational activities such as playing card games with friends, learning at school, or taking tests. Subjects may become bored, fatigued, or annoyed by the game. There are no direct benefits to playing this game. Participants may quit at any time, with no penalty.

PAYMENTS: None

DATA STORAGE TO PROTECT CONFIDENTIALITY: All data will be collected in a fully anonymous fashion. There will be no way to link your child's pre-test or post-test scores to this consent form or any other identifying information. Paper files will be stored in the Principal Investigator's office. Data records will be stored in a Microsoft Excel file and backed up in Google Drive.

TIME INVOLVEMENT: Your child's participation will take approximately one and a half hours.

HOW WILL RESULTS BE USED: The results of the study will be published in journals and scientific conferences.

The research study is to do research
on other kids

We're going to play the game with other kids so we can find out data

We'll play the game and then ask them what they learned.



We're going to give them a test.
I like tests. I'm good at math tests.
Tests are fun. I get 100. Sometimes.

I want to figure out if the game worked. I need data.

Then I will publish.

The End