



# International Women's Day

#BeBoldForChange



WE ARE ALL WONDERWOMEN!



*Pat Kane*  
Cory Soren

Women's Day – 28/02/1909  
Socialist Party of America, NYC



Asch Building. Manhattan, NYC  
Triangle Shirtwaist Factory Fire, 25/03/1911  
146 mortes, 123 mulheres e adolescentes



08/03/1917 - International Women's Day em  
Petrograd (Saint Petersburg), Russia  
Greve por "Bread and Peace" pelo  
fim da I Guerra Mundial, da falta de alimentos  
na Russia e do czarismo.  
Início da Revolução Socialista de 1917

1975:



International Women's Day  
8 March

<http://www.un.org/en/events/womensday/index.shtml>

## Women's rights:



How long ago???

## Women's suffrage in Switzerland

Date	Canton
1 February 1959	<a href="#">Vaud</a>
27 September 1959	<a href="#">Neuchâtel</a>
6 March 1960	<a href="#">Geneva</a>
26 June 1966	<a href="#">Basel-Stadt</a>
23 June 1968	<a href="#">Basel-Landschaft</a>
19 October 1969	<a href="#">Ticino</a>
12 April 1970	<a href="#">Valais</a>
25 October 1970	<a href="#">Lucerne</a>
15 November 1970	<a href="#">Zurich</a>
7 February 1971	<a href="#">Aargau</a> , <a href="#">Fribourg</a> , <a href="#">Schaffhausen</a> and <a href="#">Zug</a>
2 May 1971	<a href="#">Glarus</a>
6 June 1971	<a href="#">Solothurn</a>
12 December 1971	<a href="#">Bern</a> , <a href="#">Thurgau</a>
23 January 1972	<a href="#">St. Gallen</a>
30 January 1972	<a href="#">Uri</a>
5 March 1972	<a href="#">Schwyz</a> and <a href="#">Graubünden</a>
30 April 1972	<a href="#">Nidwalden</a>
24 September 1972	<a href="#">Obwalden</a>
30 April 1989	<a href="#">Appenzell Ausserrhoden</a>
27 November 1990	<a href="#">Appenzell Innerrhoden</a> (by decision of the federal court)

[https://en.wikipedia.org/wiki/Women's\\_suffrage\\_in\\_Switzerland](https://en.wikipedia.org/wiki/Women's_suffrage_in_Switzerland)



## Women's movements...



## Gender equality movement



<http://www.shesbeautifulwhenshesangry.com/>



## Women in (Hard) Sciences



Marie Skłodowska-Curie



Física 1903  
Química 1911



Ada Lovelace

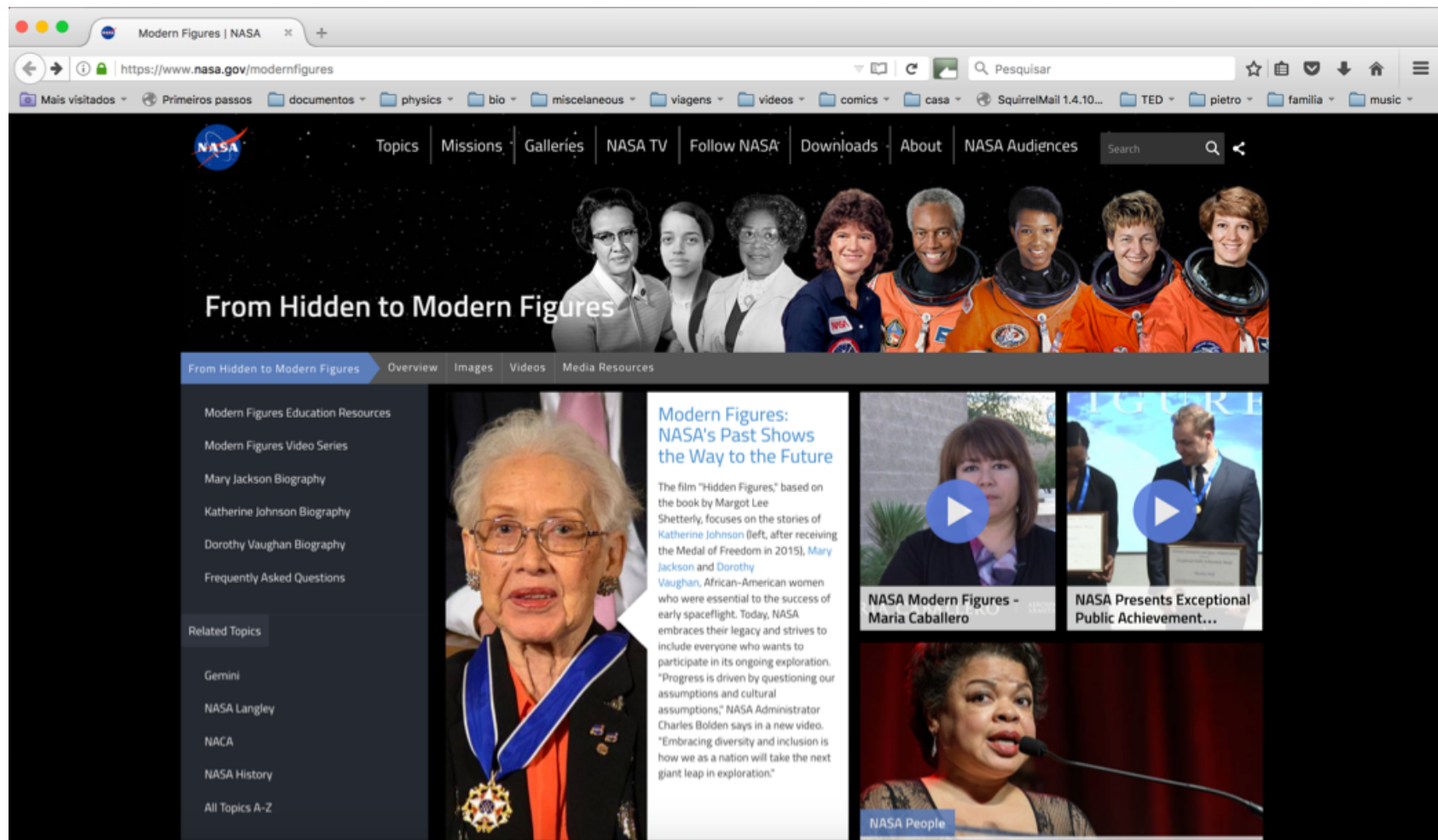


Emmy Noether

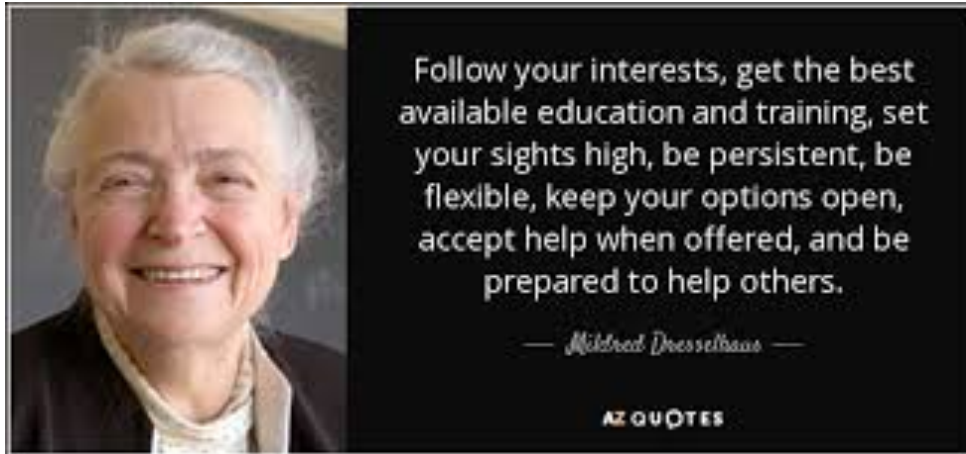


Lise Meitner

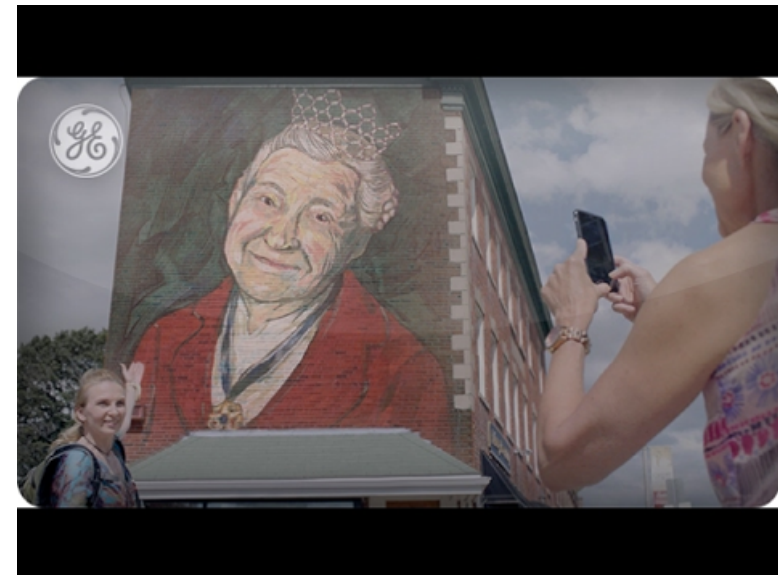




<https://www.nasa.gov/modernfigures>



**Mildred Dresselhaus** (November 11, 1930 – February 20, 2017), known as the "queen of carbon science", was the first female Institute Professor and professor emerita of physics and electrical engineering at MIT. She won numerous awards including the Presidential Medal of Freedom and the National Medal of Science.



What If Millie Dresselhaus, Female Scientist, Was Treated Like A Celebrity?

[https://www.youtube.com/watch?v=sQ6\\_fOX7ITQ](https://www.youtube.com/watch?v=sQ6_fOX7ITQ)





## Women in Science

AAUW nature EDUCATION

Co-curated by Dr. Laura Hoopes, Halstead-Bent professor of Biology at Pomona College, and the American Association of University Women (AAUW), Women in Science is a forum about issues of parity and the female experience in science. Alongside Dr. Hoopes' topics, the AAUW will also introduce topics during one week of every month. Please join in these discussions and share your experiences, perspectives, and opinions.

Moderated by **Laura Hoopes**

Join this Forum

Posted on: February 24, 2011 | Posted By: **Christianne Corbett**

### Why Do We Need Women in STEM Fields?

Aa Aa Aa

#### Topics in this Forum

- ▶ Where to find Laura Hoopes' Women in Science future thoughts?
- ▶ LAB GIRL, exciting new woman-in-science biography
- ▶ Ruth Hubbard, RIP
- ▶ The Ball Is Ending
- ▶ New DNA Learning Game Coming Soon
- ▶ NIH Women in Science Tidbits
- ▶ Woman Put Man on Moon cartoon presentation
- ▶ Reviewing the 2015 Nobel Prizes in Chemistry and Physiology or Medicine
- ▶ Women Engineers: How to Retain Them
- ▶ Albert Lasker Basic Medical Research Award

« Prev

Next »

#### Forums

- ▶ Genetics Generation
- ▶ Women in Science

« Prev

Next »



#### Chapter 1. Women and Girls in Science, Technology, Engineering, and Mathematics

© 2010 AAUW

This is a question that comes up pretty regularly. Here is one answer.

Attracting and retaining more women in the science, technology, engineering, and mathematics (STEM) workforce will maximize innovation, creativity, and competitiveness. Scientists and engineers are working to solve some of the most difficult challenges of our time, and engineers design many of the things we use daily. When women are not involved in science and engineering, experiences, needs, and desires that are unique to women may be overlooked.

For example, *Unlocking the Clubhouse: Women in Computing* discusses the fact that "some early voice-recognition systems were calibrated to typical male voices. As a result, women's voices were literally unheard. ... Similar cases are found in many other industries. For instance, a predominantly male group of engineers tailored the first generation of automotive airbags to adult male bodies, resulting in avoidable deaths for women and children" (Margolis & Fisher, 2002, pp. 2-3).

With a more diverse workforce, scientific and technological products, services, and solutions are likely to be better designed and more likely to represent all users, and the direction of

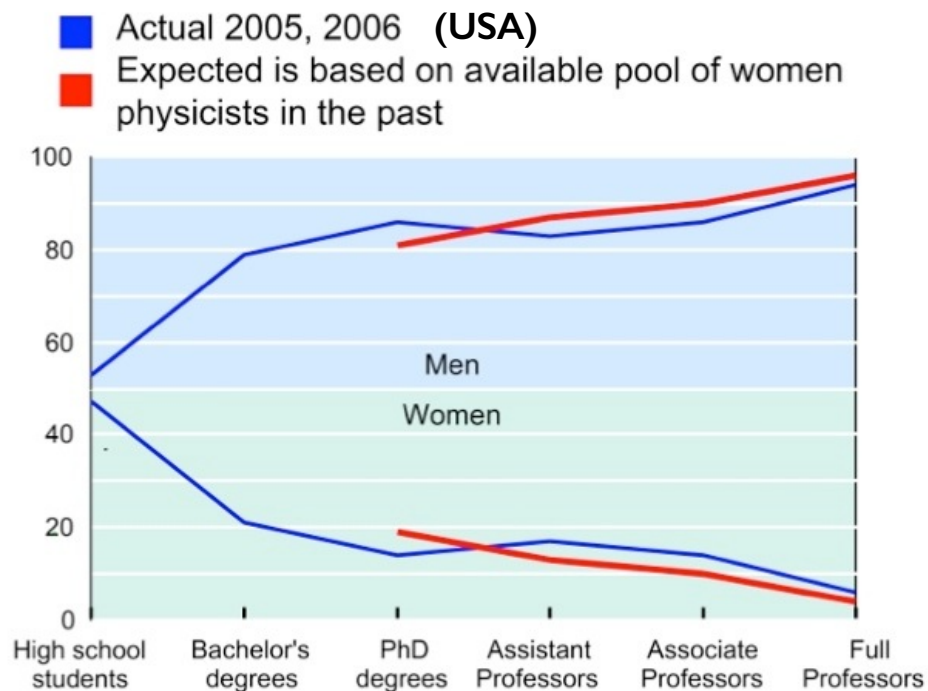
scientific inquiry will be guided by a broader array of experiences.

Why do you think it is important to have women in STEM fields?

Attracting and retaining more women in the science, technology, engineering, and mathematics (STEM) workforce will maximize innovation, creativity, and competitiveness. Scientists and engineers are working to solve some of the most difficult challenges of our time, and engineers design many of the things we use daily. When women are not involved in science and engineering, experiences, needs, and desires that are unique to women may be overlooked.

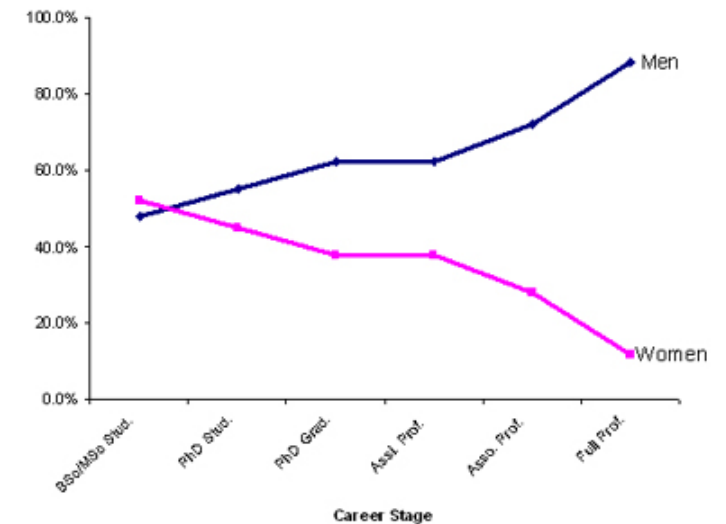
<http://www.nature.com/scitable/forums/women-in-science/why-do-we-need-women-in-stem-18256390>

The “scissors plot” summarizing these results reveals a relative scarcity of women physicists



Source: American Institute of Physics Statistical Research Center

Figure 1. The Gender Scissors



<http://www.sciencemag.org/careers/2005/02/cutting-gender-scissors>

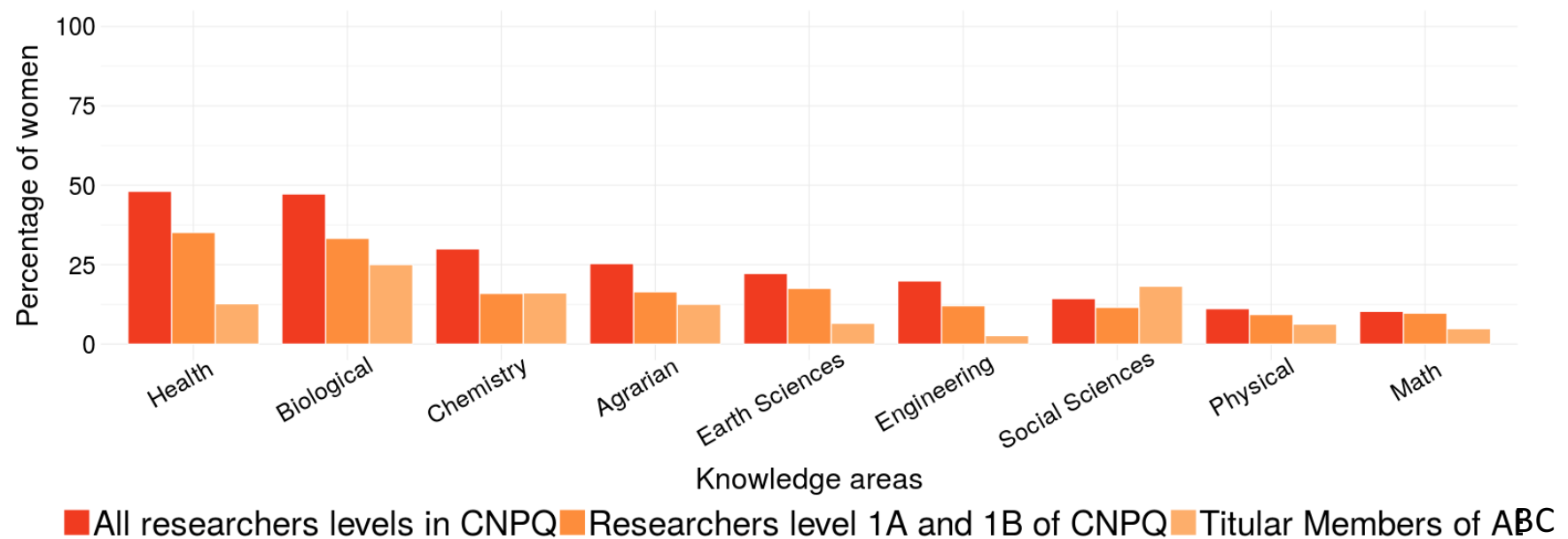
**Elizabeth H. Simmons**

Distinguished Professor of Physics Michigan State University  
ICTP Workshop for Women in Physics  
October 12, 2015

**This is a problem for Physics... and STEM!**

## Women – Brazil (2016):

### Academia Brasileira de Ciências & Produtividade em Pesquisa CNPq



Marcia Barbosa, UFRGS

WG5: Women in Physics | I...

iupap.org/working-groups/wg5-women-in-physics/ 90% Pesquisar

Mais visitados Primeiros passos documentos physics bio miscelaneous viagens videos comics casa SquirrelMail 1.4.10... TED pietro familia music

**IUPAP** International Union of Pure and Applied Physics

Search Go

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EXECUTIVE COUNCIL CONFERENCES WORKING GROUPS INTER-UNION REPRESENTATIVES NEWSLETTER FACEBOOK

## WG5: WOMEN IN PHYSICS

Working Group 5 (WG5), [Women in Physics \(WiP\)](#), was created by the [International Union of Pure and Applied Physics](#) in 1999 as a resolution of the Atlanta, Georgia, USA General Assembly to survey the present situation and report to the Council and the Liaison Committees, and to suggest means to improve the situation for women in physics.

### Charge to Working Group

- to survey the situation for women in physics in IUPAP member countries;
- to analyse and report the data collected along with suggestions on how to improve the situation;
- to suggest ways that women can become more involved in IUPAP, including the Liaison Committees, the Commissions, the Council, and the General Assemblies;
- to report all findings at the General Assembly in 2002.

In carrying out the above charge, it may prove useful to organise and convene an international meeting on women in physics. If such a meeting occurs, it should be planned so that a full account can be provided with the report at the General Assembly in 2002.

**In this section**

[All Working Groups](#)

[WG5: Women in Physics \(WiP\)](#)

ICWIP





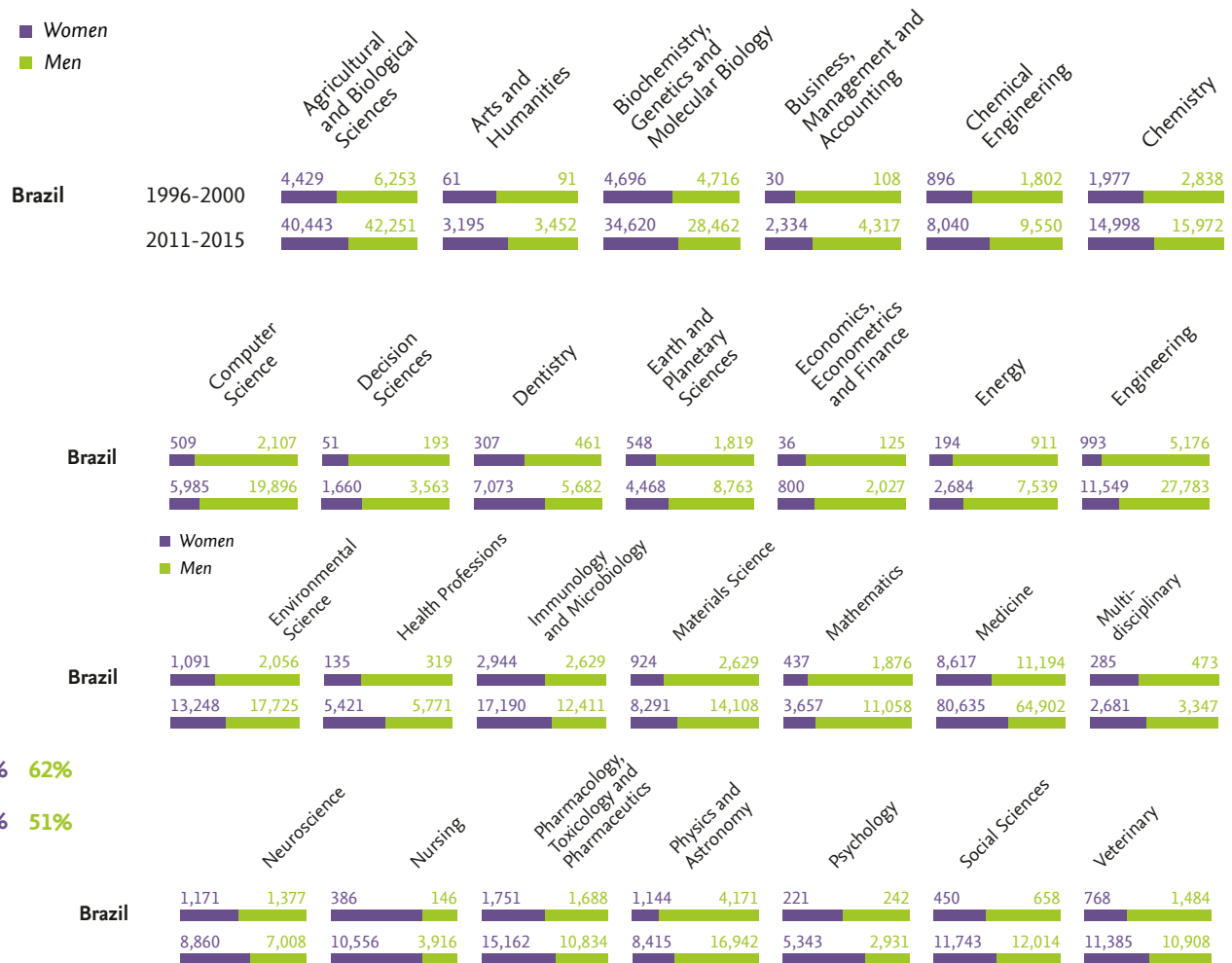
# Surprising New Study: Brazil Now A Global Leader In Gender Equality In Science



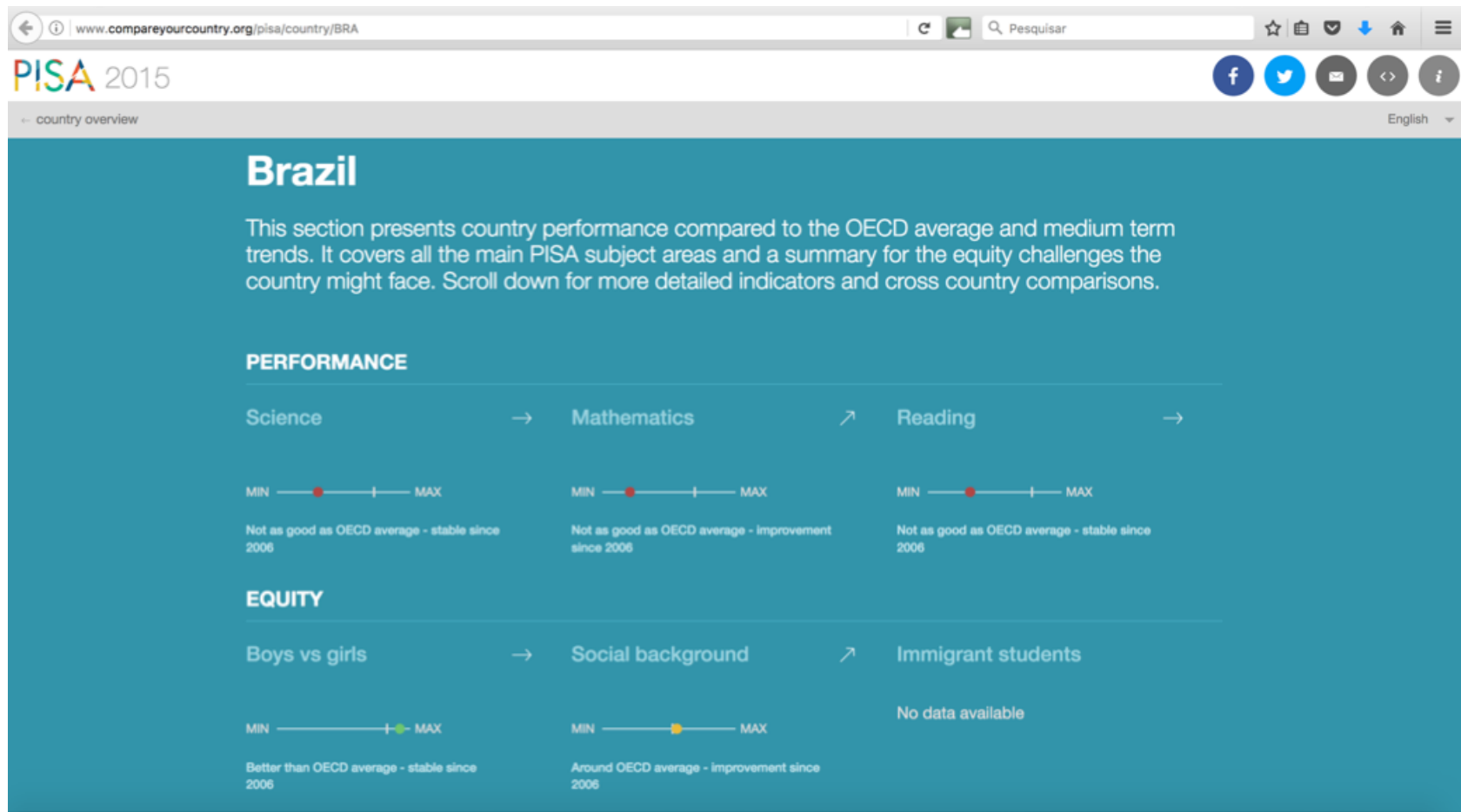
*Brazilian women take part in the commemoration of the International Women's Day at Paulista Avenue in Sao Paulo, Brazil on March 8, 2017. (Photo: NELSON ALMEIDA/AFP /Getty Images)*

<https://www.forbes.com/sites/shannonsims/2017/03/08/surprising-new-study-brazil-now-a-global-leader-in-gender-equality-in-science/#3aef28aa6f44>

## Brazil



[https://www.elsevier.com/\\_\\_data/assets/pdf\\_file/0008/265661/ElsevierGenderreport\\_final\\_for-web.pdf](https://www.elsevier.com/__data/assets/pdf_file/0008/265661/ElsevierGenderreport_final_for-web.pdf)



### PISA 2015 - BRAZIL:

Boys outperformed girls by 9 score points in 2006 and by 4 score points in 2015. While there was no significant improvement in performance among boys during this period, the mean score of girls is 13 points higher in 2015 than it was in 2006. The gender gap in science performance in Brazil is now similar to the OECD average gap.

# What are the "culprits"?

Travel & After Hours

Aggressivity

Stereotypes

**XXfactor** WHAT WOMEN REALLY THINK JUNE 26 2014 11:06 AM

**Slate** [User Icon] [Search Icon] [Menu Icon]

## This Great Ad Reveals All the Ways We Hold Girls Back

By Amanda Marcotte

[Facebook Icon] 11.2k [Twitter Icon] [Reddit Icon] 603



<https://www.youtube.com/watch?v=XP3cyRRAfX0>

# #LikeAGirl



## WOMEN

### The Reaction To #LikeAGirl Is Exactly Why It's So Important

03/02/2015 14:50 BRST | Atualizado 03/05/2016 10:55 BRT

89.7 K



Alanna Vagianos

Women's Editor, The Huffington Post

<https://www.youtube.com/watch?v=XjJQBjWYDTs>

# #RedrawTheBalance

[https://www.youtube.com/watch?v=kJP1zPOfq\\_0](https://www.youtube.com/watch?v=kJP1zPOfq_0)



15/09/2015 11:57 - Atualizado em 15/09/2015 18:00

### 'Like a girl', da Always, leva Emmy de melhor comercial de 2015

Vídeo foi lançado no Super Bowl 2015 e é um dos mais vistos do ano. Seis comerciais foram indicados para o prêmio; veja lista.

Do G1, em São Paulo



Propaganda desconstrói percepções machistas do que significa fazer algo 'que nem menina' (Foto: Reprodução/YouTube)



Inspiring The Future - Redraw The Balance



# What are the "culprits"?

## Lack of Role Models

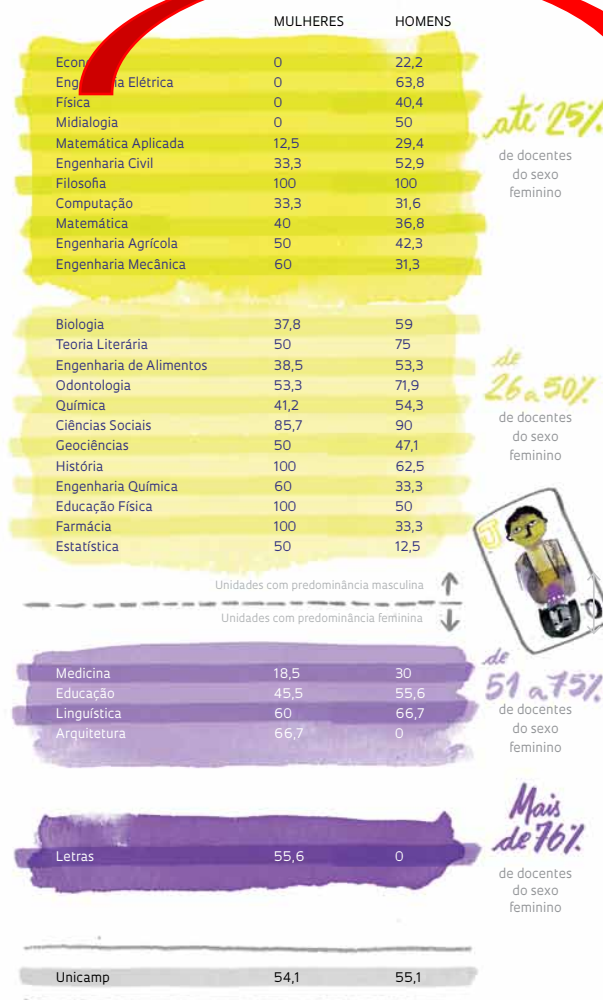
# As chances das mulheres na universidade

Estudo sugere que disciplinas com alta presença feminina não garantem às pesquisadoras vantagem para chegar ao topo da carreira

Pesquisa Fapesp **238** (dez/2015)

## Presença e ascensão desiguais

Chances de docentes da Unicamp dos sexos masculino e feminino chegarem ao nível mais alto da carreira em algumas unidades, em %



**Física (2018):  
Docentes: 85**

**M F  
77 8**

**Profs. Titulares:  
Total: 23 (~27%)**

**M F  
21 2**



<http://www.sciencemag.org/news/2017/01/young-girls-are-less-likely-believe-their-gender-brilliant-their-age>

## SHARE

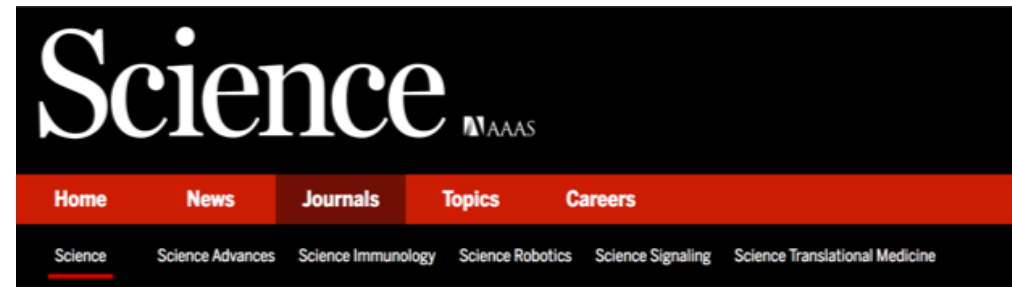


# Young girls are less likely to believe their gender is brilliant as they age

By [Emma Hiolski](#) | Jan. 26, 2017, 2:00 PM

"A person in my office is really, really smart—they solve problems faster and better than anyone else." When 5-year-old girls hear this statement, they're as likely as boys are to assume the smart person is of their own gender. But by age 6 to 7, they're 20%–30% **less likely to assume this brilliant individual is a woman**, according to a study published today in *Science*. In another experiment, researchers found that the older girls were less interested than their male counterparts in games—one resembling a two-color version of Chinese checkers—that the team described as being designed for "really, really smart children." They remained equally interested in games for "children who try really, really hard," though. The researchers say these early ideas about gender and intelligence could steer young women away from high-profile careers associated with high intelligence, like neuroscience or engineering. One surprising find? Boys and girls both acknowledged that girls get better grades, indicating that children don't necessarily associate success in school with brilliance. The scientists hope to determine where else kids' perceptions of intelligence might originate. In the meantime, they suggest emphasizing perseverance, rather than smarts, when promoting activities for both girls and boys.

Posted in: [Social Sciences](#)  
DOI: [10.1126/science.aal0663](#)



## SHARE

## REPORT



# Gender stereotypes about intellectual ability emerge early and influence children's interests

Lin Bian<sup>1,2,\*</sup>, Sarah-Jane Leslie<sup>3</sup>, Andrei Cimpian<sup>1,2,\*</sup>

✦ See all authors and affiliations

*Science* 27 Jan 2017:  
Vol. 355, Issue 6323, pp. 389–391  
DOI: [10.1126/science.aah6524](#)



[Article](#)

[Figures & Data](#)

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## Abstract

Common stereotypes associate high-level intellectual ability (brilliance, genius, etc.) with men more than women. These stereotypes discourage women's pursuit of many prestigious careers; that is, women are underrepresented in fields whose members cherish brilliance (such as physics and philosophy). Here we show that these stereotypes are endorsed by, and influence the interests of, children as young as 6. Specifically, 6-year-old girls are less likely than boys to believe that members of their gender are "really, really smart." Also at age 6, girls begin to avoid activities said to be for children who are "really, really smart." These findings suggest that gendered notions of brilliance are acquired early and have an immediate effect on children's interests.

# So...

Women are under represented in Exact Sciences

It is NOT a question of time!

What to do?

**Work Together**  
**Network**  
**Identify Barriers – > CHANGE!!**



# Representation matters!!!!



I took my girlfriend to see it. She knew nothing about wonder woman. In the opening training scene she leaned over and whispered, "Those are all women?" After the movie, she had to take a moment in the car. She said, "so that's what representation feels like. I had no idea that kind of role model was missing from my life." Then we cried. Thank you, Wonder Woman.

Yesterday at 1:39 PM · Edited · Like · Reply · 🇺🇸 🇬🇧 🇫🇷 🇮🇹 186

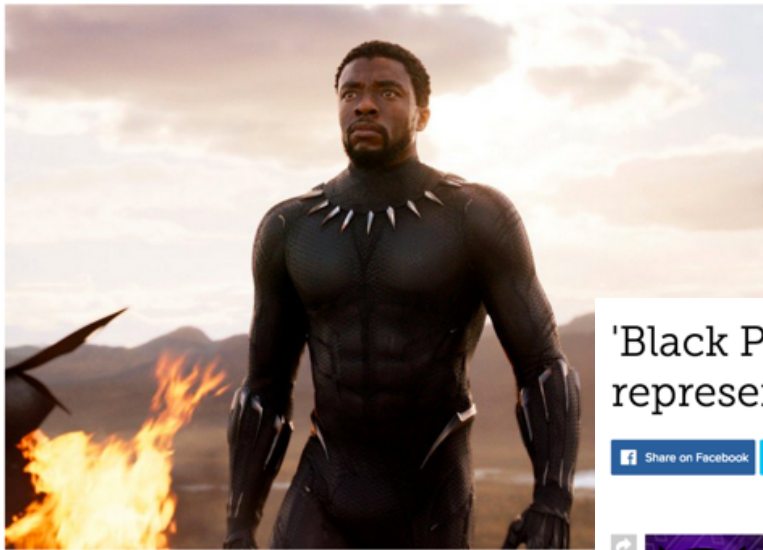


Thank you, Wonder Woman



# 'Black Panther' Brings Hope, Hype and Pride

By SALAMISHAH TILLET FEB. 9, 2018



Chadwick Boseman in a scene from "Black Panther." Marvel Studios, via Associated Press

<https://www.nytimes.com/2018/02/09/movies/black-panther-african-american-fans.html>

<https://mashable.com/2018/02/21/black-panther-representation/#6DMfRMjREaq2>

## 'Black Panther' is a huge victory for representation in film

Share on Facebook Share on Twitter +

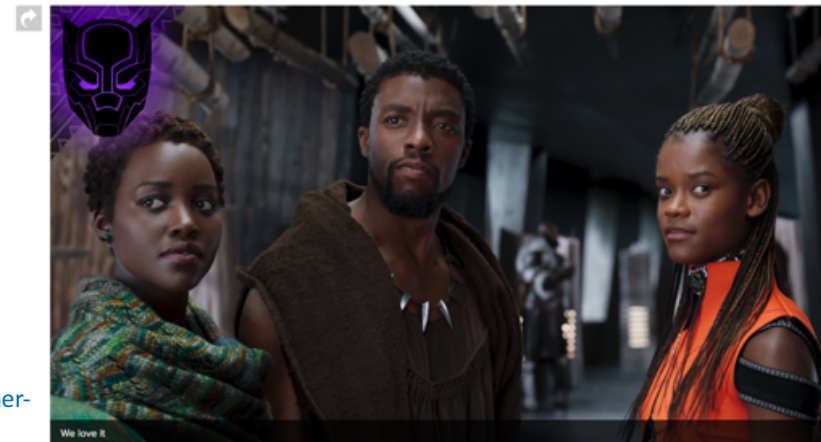
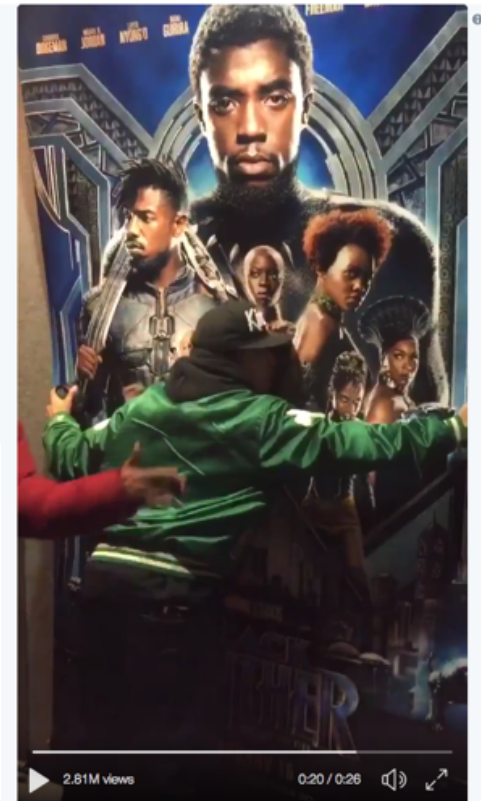


IMAGE: MARVEL, MASHABLE COMPOSITE



Lee Edward Colston  
@LeeColston2

"This is what white people get to feel like ALL THE TIME!!!!"  
#AllTheTime

Can somebody get this video to Ryan Coogler,  
@chadwickboseman @michaelb4jordan @Lupita\_Nyong'o  
@ImAngelaBassett @DanaiGurira and this dope ass cast &  
team so we can say thank you personally?

Forreal tho

2:13 AM - Dec 19, 2017

4,038 2,003 people are talking about this

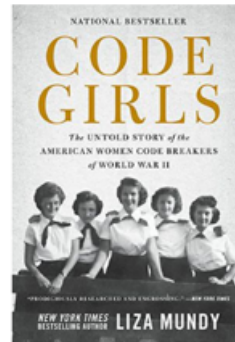
## Why We Need to Start Building Monuments to Groundbreaking Women

The brilliant female codebreakers of WWII were forgotten to history, but would that have happened had they been recognized with the same fervor as men?



By Liza Mundy  
SMITHSONIAN.COM  
MARCH 1, 2018

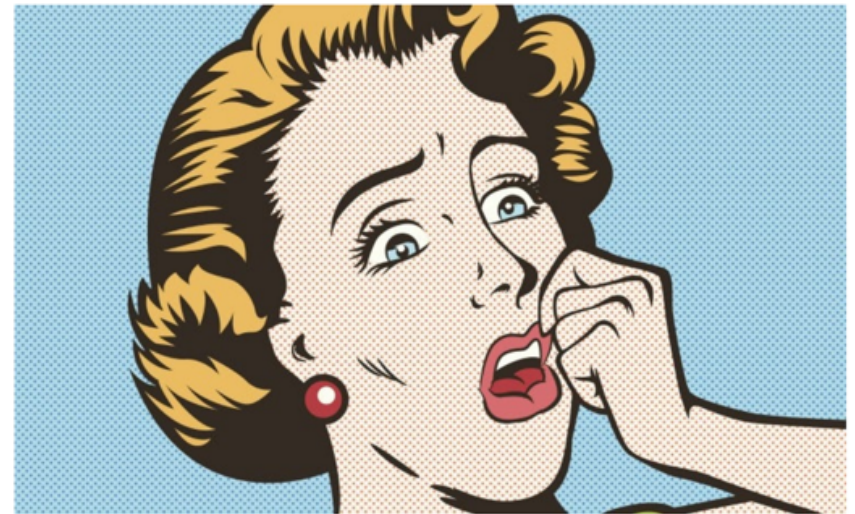
<https://www.smithsonianmag.com/history/why-we-need-start-building-monuments-groundbreaking-women-180968306/>



## The representation of women in advertising hasn't improved in a decade

*A new report released at the Cannes Lions festival highlights how men get four times as much screen time as women and are more likely to be shown as leaders.*

By Rachel Gee 21 Jun 2017 2:45 pm



<https://www.marketingweek.com/2017/06/21/representation-women-ads/>



**image\_hack**  
**CHANGING HOW  
WOMEN  
ARE PORTRAYED IN  
ADVERTISING**

BrandQuery

See what happened when one brand decided to "hack" one of the biggest stock photo sites to alter search results. Learn more at [www.BrandQuery.com](http://www.BrandQuery.com).

<https://www.linkedin.com/pulse/how-one-brand-changing-women-portrayed-advertising-wendy-poischbeg/>

**Custom Solutions**  
Skagit Bank is committed to serving you and your business. Your financial products need to work for you, that's why our business building team customizes solutions to fit your needs. We want to help you work efficiently for your success and your business' longevity. We believe in Genuine Lasting Relationships. We are Skagit Bank.

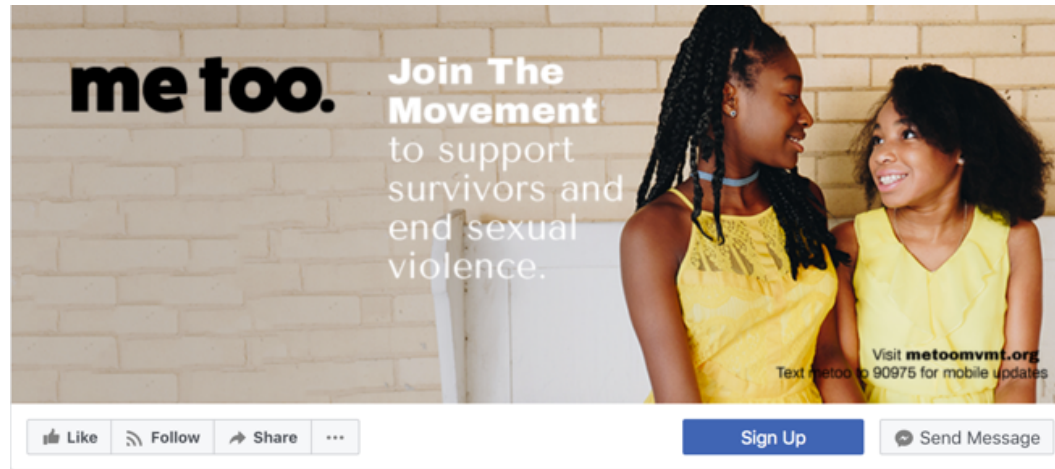
**SKAGIT BANK**





# HeForShe

UN Women Solidarity Movement  
for Gender Equality



# TIME'S<sup>TM</sup> =UP

The clock has run out on sexual assault, harassment and inequality in the workplace. It's time to do something about it.

## Implicit, unconscious (= cognitive) bias....

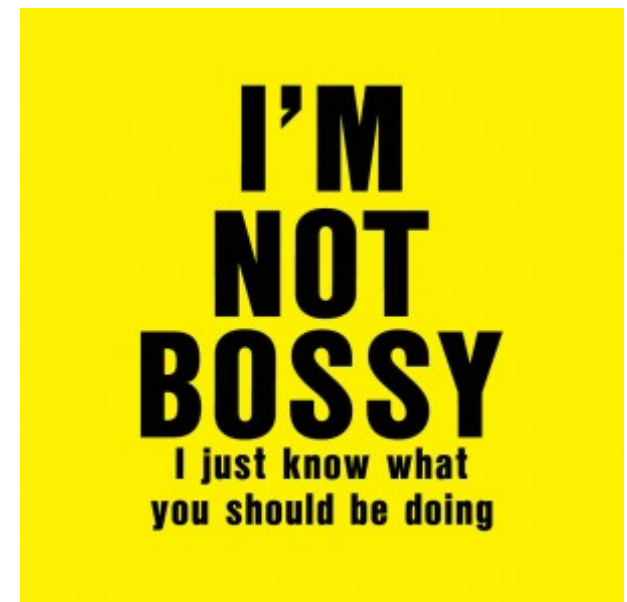


### Words attributed to Men and Women

What makes a good manager?



Dr. Bian Welle. Director of People Analytics, Google:  
[www.gv.com/lib/unconscious-bias-at-work](http://www.gv.com/lib/unconscious-bias-at-work)





# Implicit, unconscious (= cognitive) bias....



## Words attributed to Men and Women

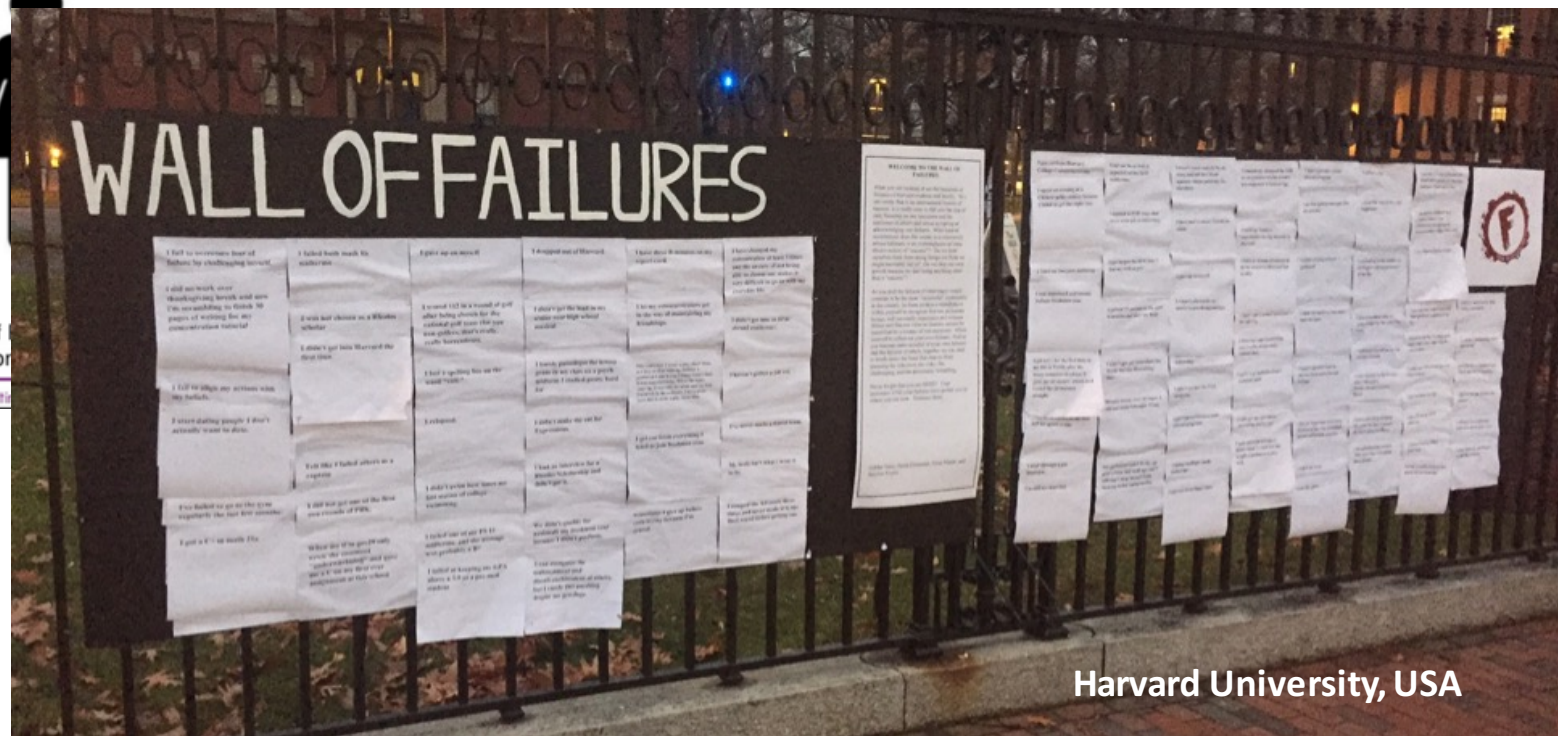
What makes a good manager?

Self-confident  
Desire responsibility  
Industrious  
Assertive  
Consistent  
Logical  
Firm  
Aggressive  
Steady  
Skilled in business matters  
Vigorous  
Emotionally stable  
Forceful  
Analytic ability  
Direct  
Frank

71%

Dr. Brian Welle, Director of  
[www.gv.com/lib/uncor](http://www.gv.com/lib/uncor)

© Banducci Consulting



Harvard University, USA

## Implicit, unconscious (= cognitive) bias....



### WELCOME TO THE WALL OF FAILURES

What you are looking at are the hundreds of failures of Harvard students and faculty. At a university that is an international beacon of success, it is really easy to fall into the trap of only focusing on our successes and the successes of others and never accepting or acknowledging our failures. What kind of environment does this create in a community whose hallmark is an overemphasis on some elusive notion of "success"? Do we hold ourselves back from doing things we think we might inevitably fail at? Do we stop our own growth because we fear being anything other than a "success"?

As you read the failures of what many would consider to be the most "successful" community in the country, let them awaken a mindfulness within yourself to recognize that we, as human beings, will inevitably experience and witness failure and that our value as humans cannot be quantified by a resume of our successes. Allow yourself to reflect on your own failures. And as you become more mindful of your own failures and the failures of others, together we can start to break down the fears that stop us from pursuing the unknown, the risky, the challenging, and the potentially rewarding.

Never forget that you are HERE! Your successes AND your failures have gotten you to where you are now. Embrace them.

Gabby Sims, Sarah Grammar, Eliza Mantz, and Reylon Yount

I fail to overcome fear of failure by challenging myself.

I did no work over thanksgiving break and now I'm scrambling to finish 30 pages of writing for my concentration tutorial

I fail to align my actions with my beliefs.

I start dating people I don't actually want to date.

I've failed to go to the gym regularly the last few months.

I got a C+ in math 21a

I failed both math 1b midterms

I was not chosen as a Rhodes scholar

I didn't get into Harvard the first time.

Felt like I failed others as a captain

I did not get one of the first two rounds of PBK.

When my tf in gov20 only wrote the comment "underwhelming" and gave me a C on my first ever assignment at this school

I gave up on myself

I scored 112 in a round of golf after being chosen for the national golf team (for you non-golfers, that's really, really horrendous).

I lost a spelling bee on the word "volt."

I relapsed.

I didn't swim best times my last season of college swimming.

I failed one of my PS 11 midterms, and the average was probably a B+

I failed at keeping my GPA above a 3.5 as a pre-med student

I dropped out of Harvard.

I didn't get the lead in my senior year high school musical.

I barely passed/got the lowest grade in my class on a psych midterm I studied pretty hard for

I didn't make the cut for Expressions.

I had an interview for a Rhodes Scholarship and didn't get it.

We didn't qualify for nationals my freshman year because I didn't perform.

I can recognize the maltreatment and disenfranchisement of others, but I rarely DO anything despite my privilege.

I have three B minuses on my report card.

I let my extracurriculars get in the way of maintaining my friendships.

Two years ago, I wrote a play about them as a way to deal with my feelings. I produced it and it was 2 hours longer than it was supposed to be. When the lights came up, it was only my mom and my best friend left in the audience. I have never been able to write a play since then.

I got cut from everything I tried to join freshman year.

Sometimes I give up before even trying because I'm scared.

I have changed my concentration at least 3 times and the anxiety of not being able to choose one makes it very difficult to go on with everyday life.

I didn't get into an HMC abroad conference.

I haven't gotten a job yet.

I've never made a travel team.

My body isn't what I want it to be.

I comps'd the Advocate three times and never made it to the final round before getting cut.



## Implicit, unconscious (= cognitive) bias....

The screenshot shows a web browser window with the URL [https://www.ted.com/talks/amy\\_cuddy\\_your\\_body\\_language\\_shapes\\_who\\_you\\_are?language=pt-br](https://www.ted.com/talks/amy_cuddy_your_body_language_shapes_who_you_are?language=pt-br). The browser's address bar and tabs are visible at the top. The TED logo and tagline 'Ideas worth spreading' are on the left. Navigation links 'WATCH', 'DISCOVER', 'ATTEND', 'PARTICIPATE', and 'ABOUT' are on the right. The main content area features a large video player with a play button overlay. The video title is 'Amy Cuddy: Sua linguagem corporal molda quem você é'. Below the title, it says 'TEDGlobal 2012 · 21:02 · Filmed Jun 2012'. There are links for '48 subtitle languages' and 'View interactive transcript'. On the right side of the video player, there are icons for 'Add to list', 'Favorite', 'Download', and 'Rate'. Below the video player, there is a 'Share this idea' section with icons for Facebook, LinkedIn, Twitter, Link, Email, and Embed. The view count '39,618,158' and the year '(2017)' are displayed next to the share icons.

Secure [https://www.ted.com/talks/amy\\_cuddy\\_your\\_body\\_language\\_shapes\\_who\\_you\\_are?language=pt-br](https://www.ted.com/talks/amy_cuddy_your_body_language_shapes_who_you_are?language=pt-br)

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**TED** Ideas worth spreading WATCH DISCOVER ATTEND PARTICIPATE ABOUT

Amy Cuddy:

# Amy Cuddy: Sua linguagem corporal molda quem você é

TEDGlobal 2012 · 21:02 · Filmed Jun 2012

48 subtitle languages ?

View interactive transcript

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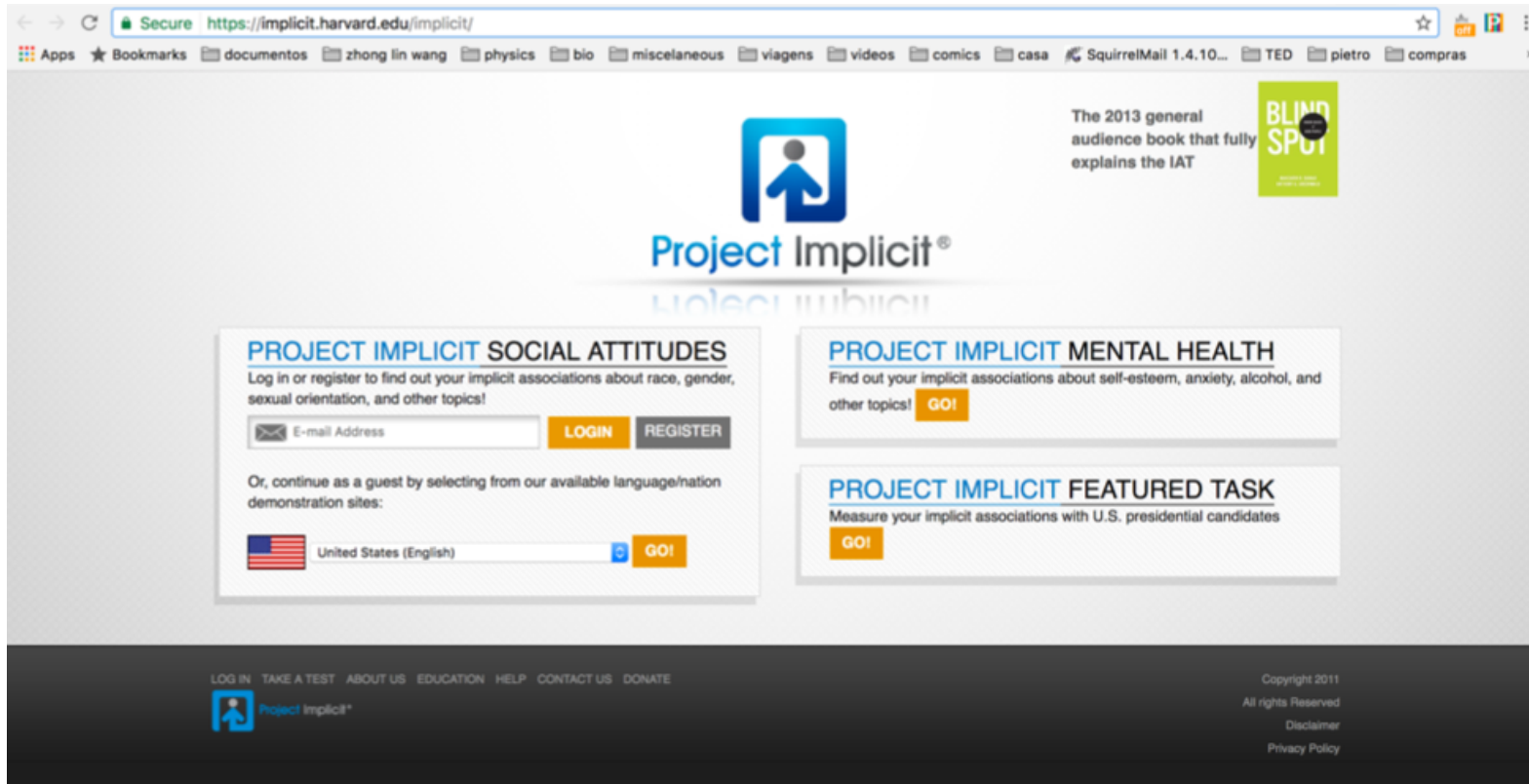
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## Implicit, unconscious (= cognitive) bias....

<https://www.projectimplicit.net/index.html>



### About Us

Project Implicit is a non-profit organization and international collaboration between researchers who are interested in **implicit social cognition - thoughts and feelings outside of conscious awareness and control**. The goal of the organization is to educate the public about hidden biases and to provide a “virtual laboratory” for collecting data on the Internet.