

# Mujeres en la Física

## Desconstruyendo el tejado de cristal y el laberinto de cristal

**Chega de mi mi mi ...  
É a mesma distância para nós dois!**



Cuál es el problema?

Por qué deberíamos importarnos?

Cuales son los mitos?

O que hacer?

Conclusiones

# Cuál es el problema?

Comitê Assessor Física e Astronomia 2013



# Cuál es el problema?

Solvay 1927



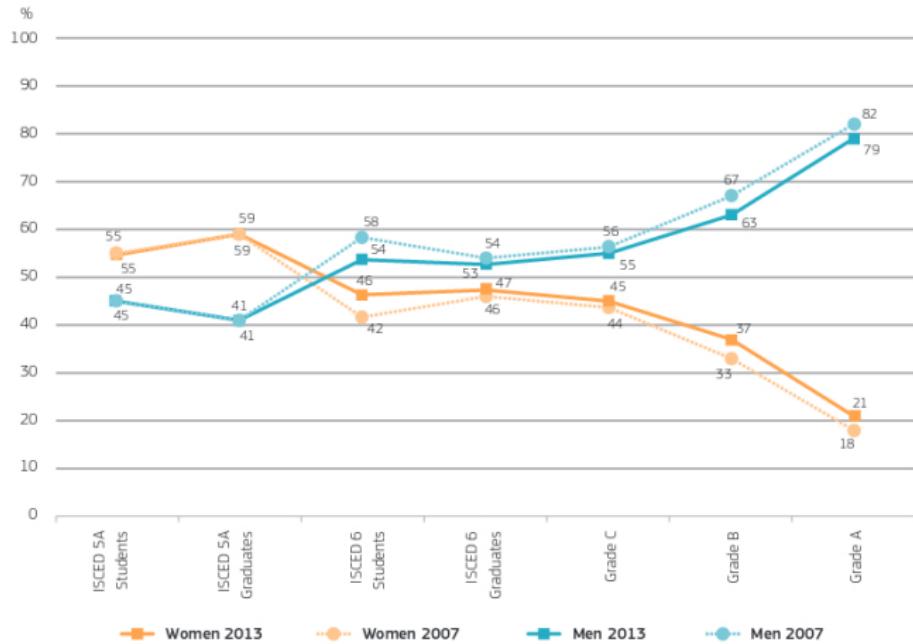
# Cuál es el problema?

Solvay 2011



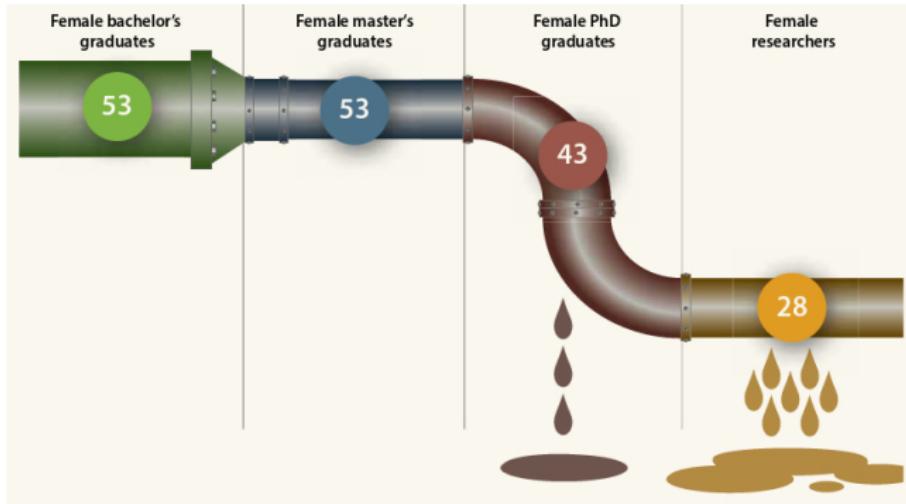
# Cuál es el problema?

European Commission, Gender Report, 2013



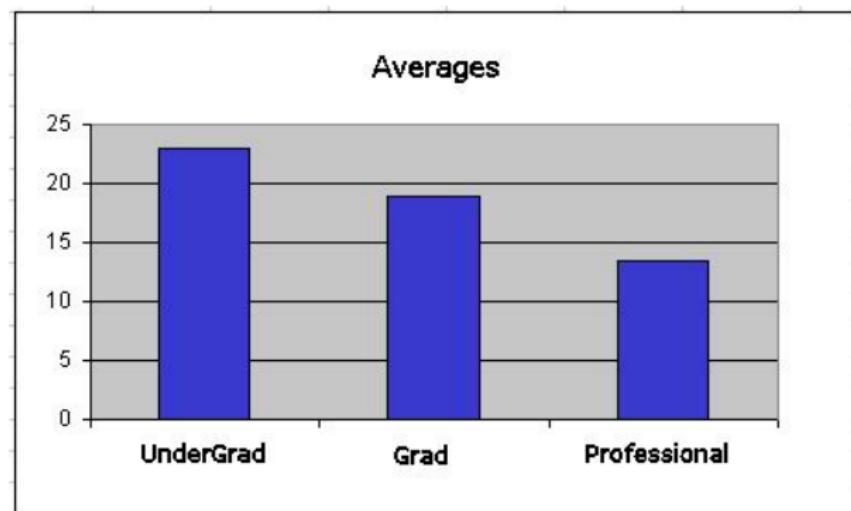
# Cuál es el problema?

World, 2013



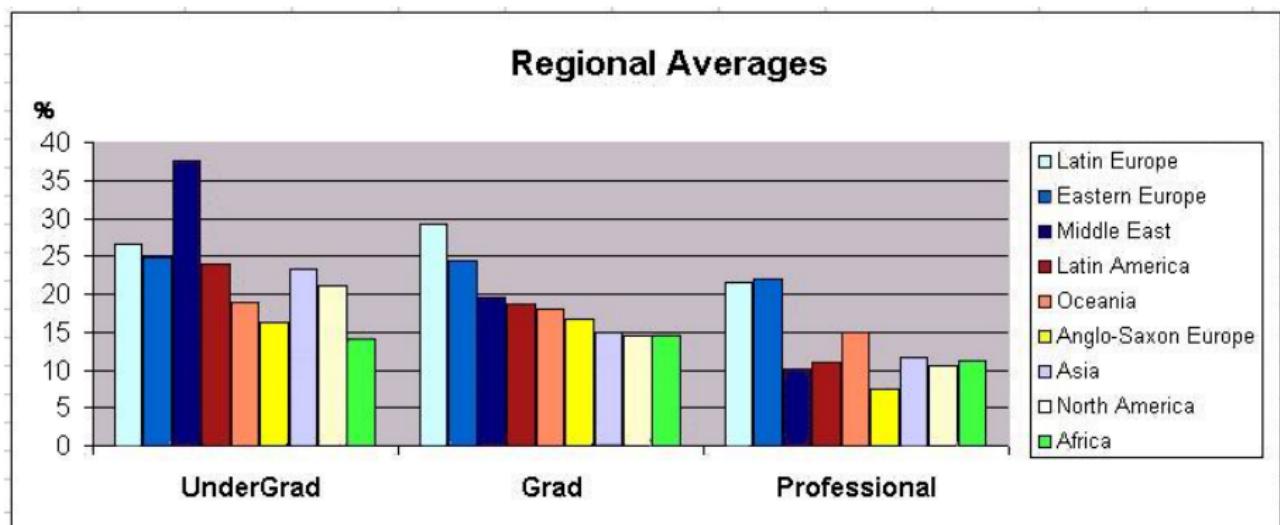
# Mujeres en la Física en el Mundo

Saitovich, Lima and MCB, Mulheres na Fisica: Por que to poucas?(2015)



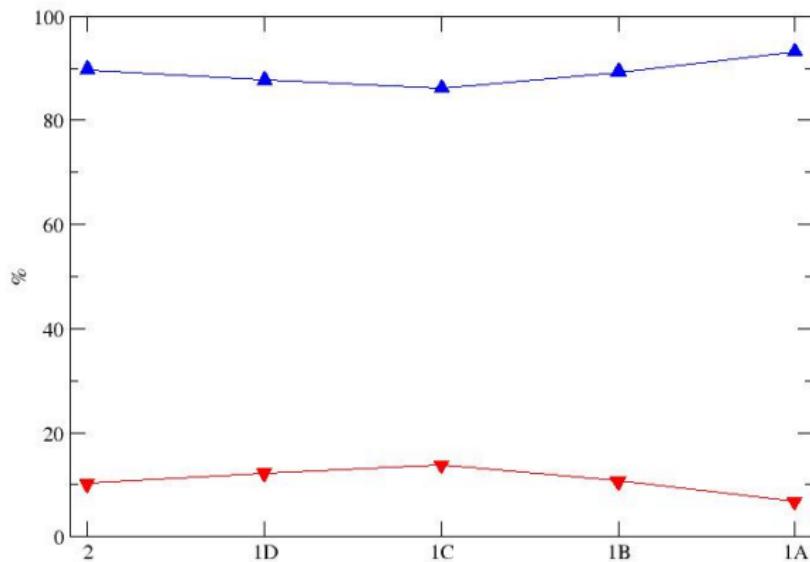
# Mujeres en la Física Regiones del Mundo

Saitovich, Lima and MCB, Mulheres na Fisica: Por que to poucas?(2015)



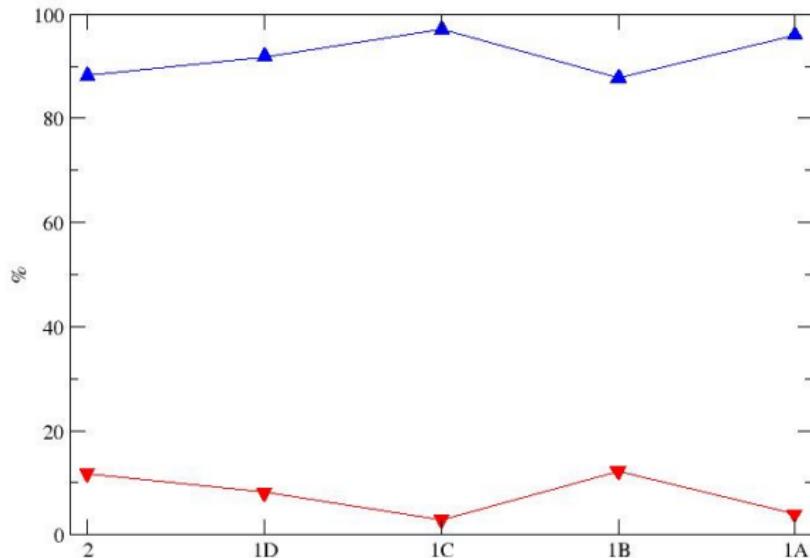
# Investigadores en Física en Brasil

Bezerra, Lazzaro, Peixoto, Lopes, Andrade, Nussenzveig Lopes and MCB  
(2018)



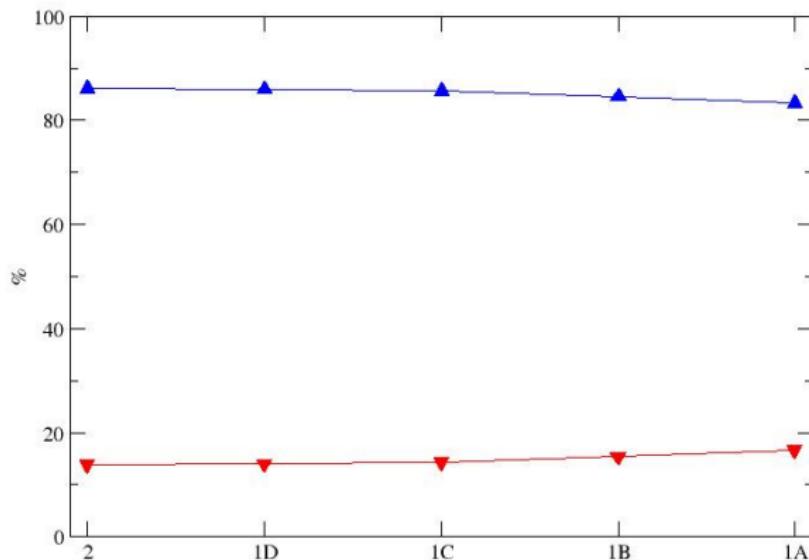
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Bezerra, Lazzaro, Peixoto, Lopes, Andrade, Nussenzveig Lopes and MCB  
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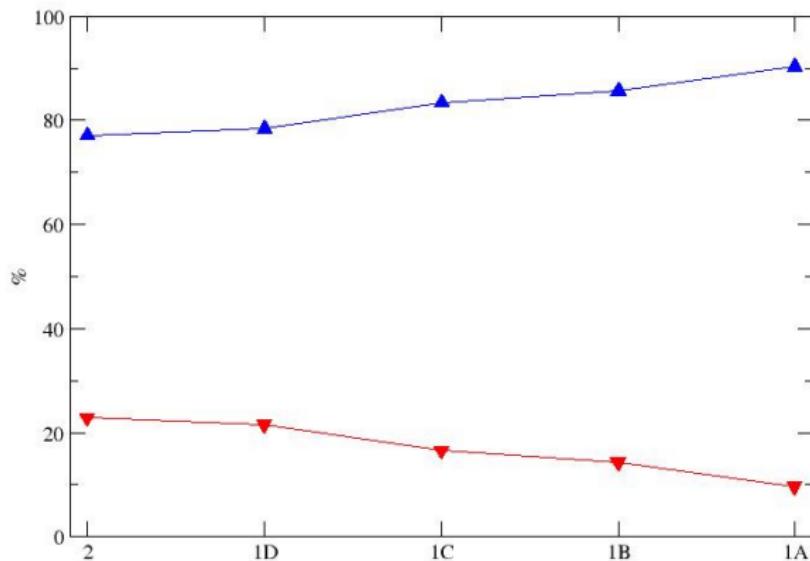
# Investigadores en Economía en Brasil

Bezerra, Lazzaro, Peixoto, Lopes, Andrade, Nussenzveig Lopes and MCB  
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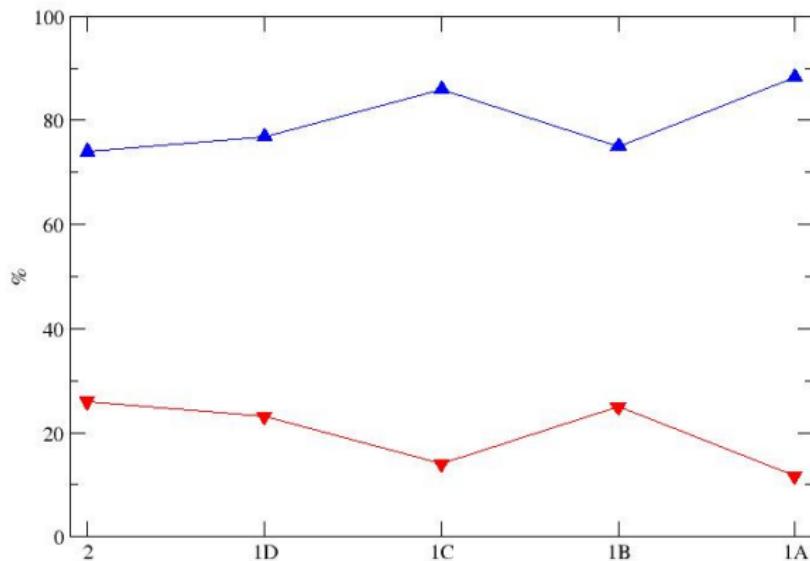
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(2018)



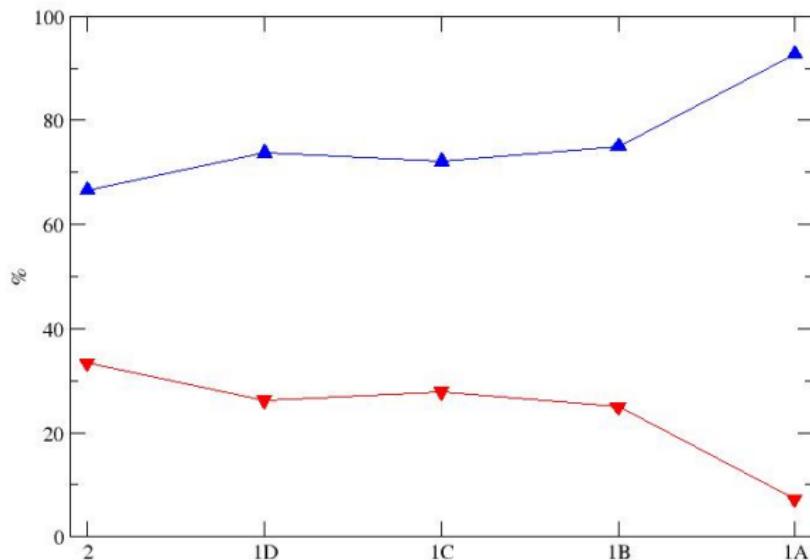
# Investigadores en Geología en Brasil

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(2018)



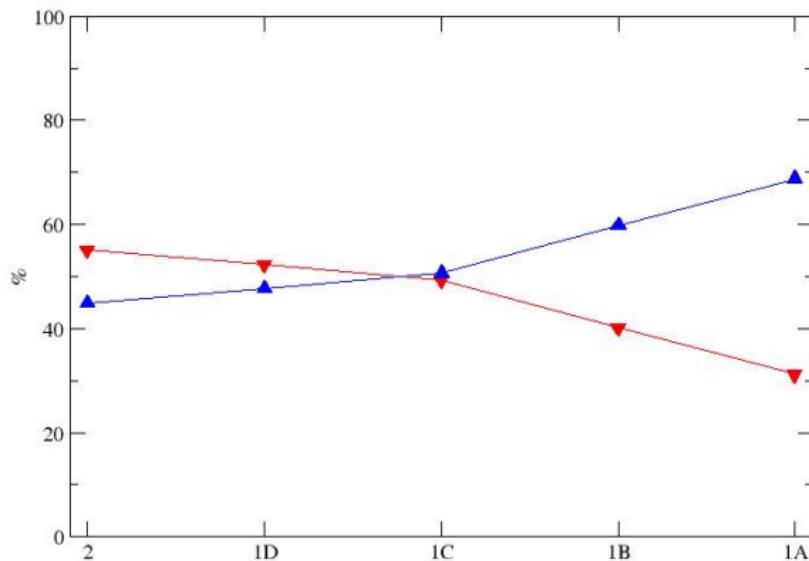
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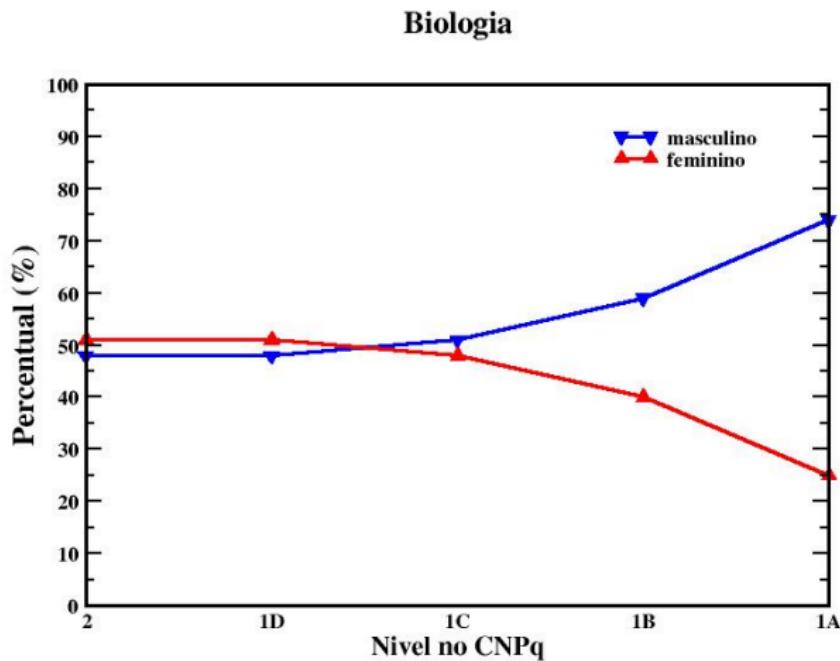
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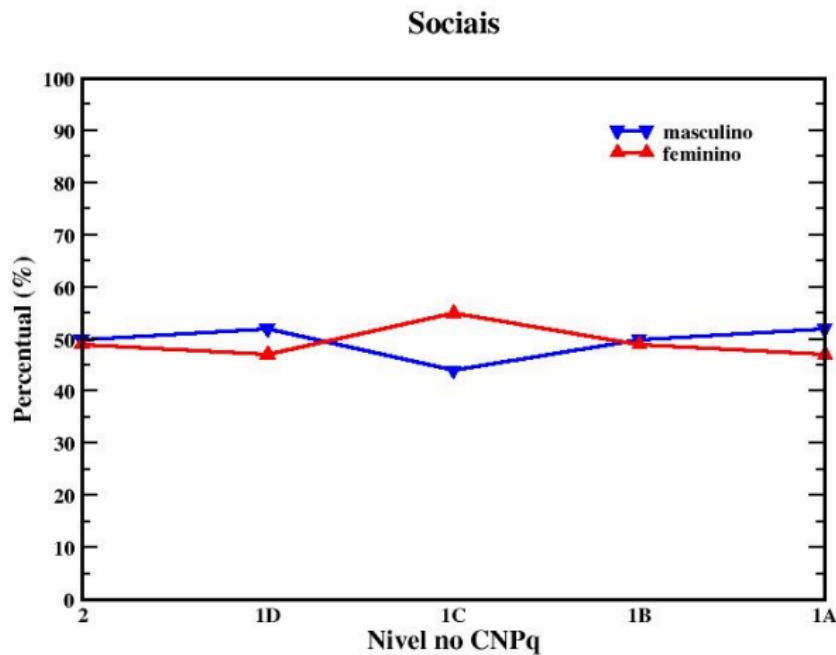
# Investigadores en Biología en Brasil

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(2018)



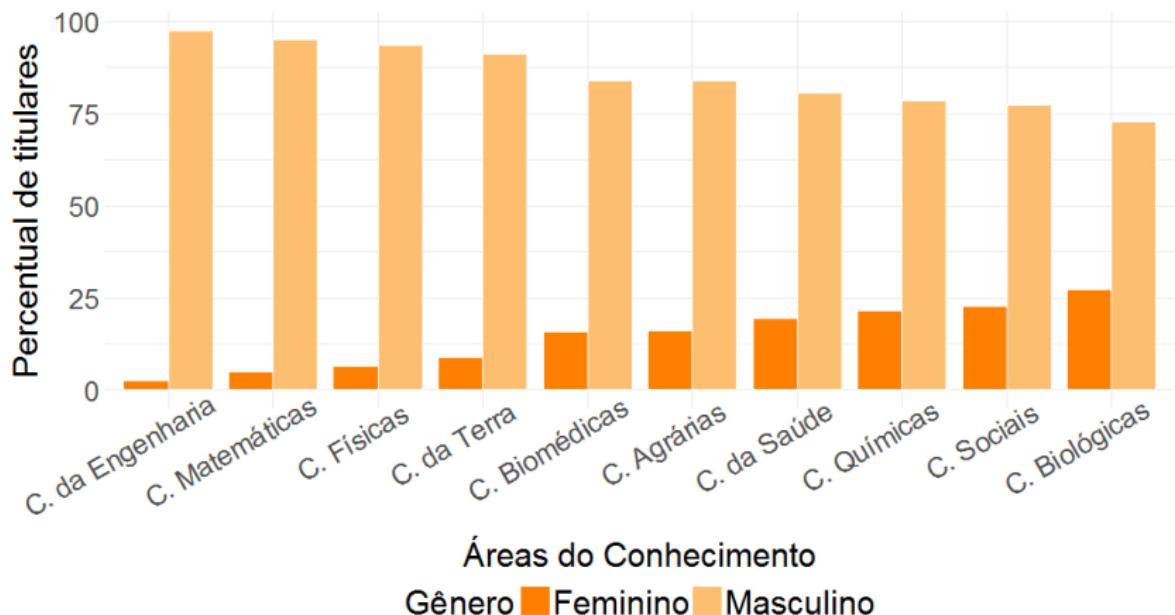
# Investigadores en Ciencias Sociales

Bezerra, Lazzaro, Peixoto, Lopes, Andrade, Nussenzveig Lopes and MCB  
(2018)



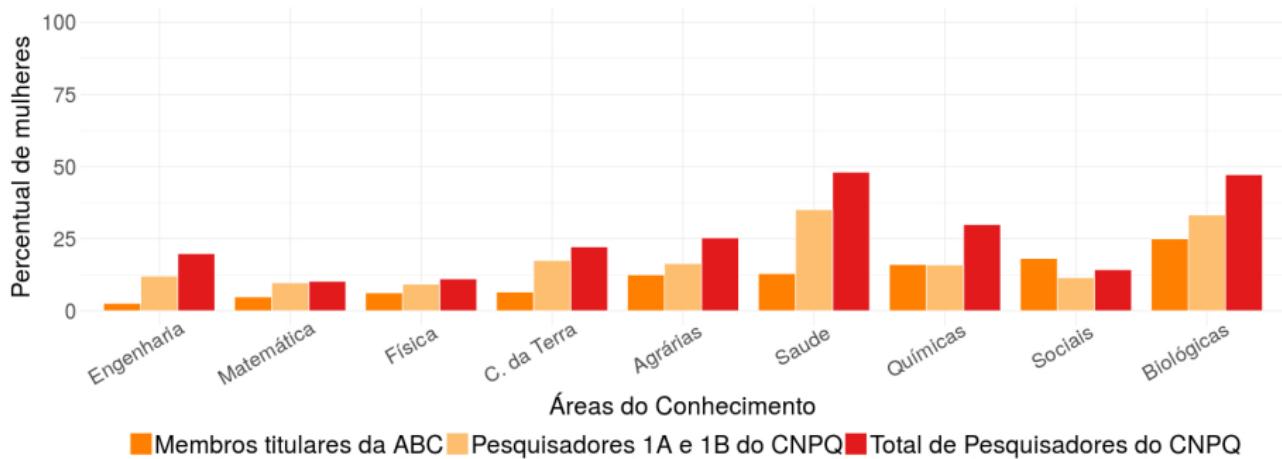
# Academia Brasileira de Ciencias

Ferrari, Martell, Okido, Romanzini, Magnan, MCB ,AABC 2018



# Academia Brasileira de Ciencias vs. Investigadores

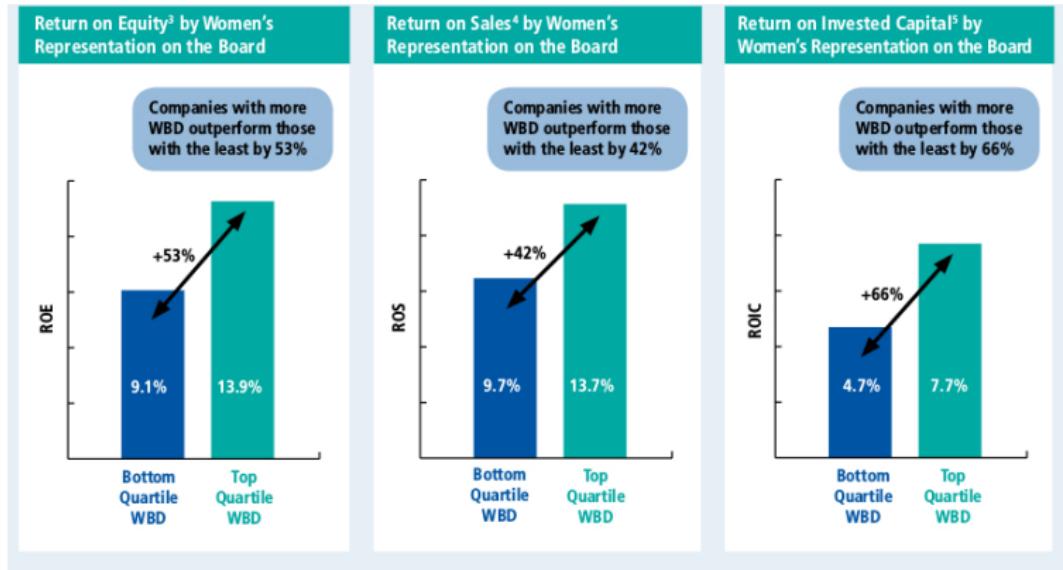
Ferrari, Martell, Okido, Romanzini, Magnan, MCB ,AABC 2018



■ Membros titulares da ABC ■ Pesquisadores 1A e 1B do CNPQ ■ Total de Pesquisadores do CNPQ

# Por qué deberíamos importarnos?

Hunt, Layton Prince, Diversity Matters, McKinsey-Company (2015)



# La Diversidad nos hace más Inteligentes

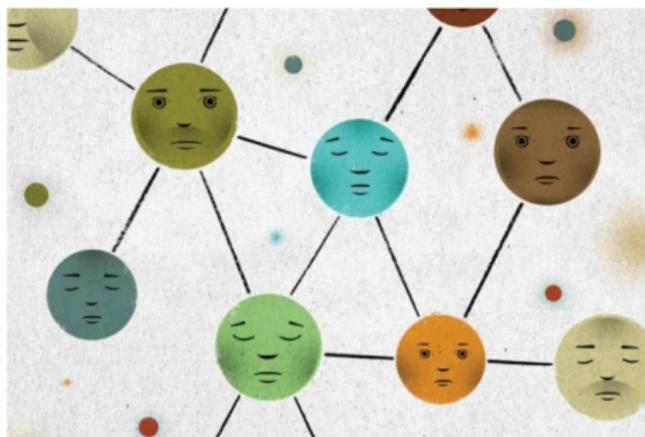
K. W. Phillips , Scientific America, 2014

THE SCIENCES

## How Diversity Makes Us Smarter

Being around people who are different from us makes us more creative, more diligent and harder-working

By Katherine W. Phillips on October 1, 2014 [أعرض هذه باللغة العربية](#)



Credit: Edel Rodriguez

# Inteligencia Colectiva

Woolley, Aggarwal and Malone, APS Philosophical Association



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## Collective Intelligence and Group Performance

Anita Williams Woolley<sup>1</sup>, Ishani Aggarwal<sup>2</sup>, and Thomas W. Malone<sup>3,4</sup>

<sup>1</sup>Tepper School of Business, Carnegie Mellon University; <sup>2</sup>Brazilian School of Public and Business Administration, Fundação Getulio Vargas; <sup>3</sup>Sloan School of Management, Massachusetts Institute of Technology; and <sup>4</sup>Center for Collective Intelligence, Massachusetts Institute of Technology

Current Directions in Psychological Science  
2015, Vol. 24(6) 420–424  
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DOI: 10.1177/0963721415599543  
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The SAGE logo consists of the word "SAGE" in a bold, serif font, preceded by a stylized circular icon.

# Selección y Compromiso

F. Dobbin, D. Schrage and A. Kalev, American Sociological Review (2015)



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## Rage against the Iron Cage: The Varied Effects of Bureaucratic Personnel Reforms on Diversity

American Sociological Review  
2015, Vol. 80(5) 1014–1044  
© American Sociological  
Association 2015  
DOI: 10.1177/0003122415596416  
<http://asr.sagepub.com>



Frank Dobbin,<sup>a</sup> Daniel Schrage,<sup>a</sup>  
and Alexandra Kalev<sup>b</sup>

# Diversidad: Fuerza y Debilidad

Saxena, Procedia Economics and Finance (2014)



Available online at [www.sciencedirect.com](http://www.sciencedirect.com)

**ScienceDirect**

Procedia Economics and Finance 11 (2014) 76 – 85

**Procedia**

Economics and Finance

[www.elsevier.com/locate/procedia](http://www.elsevier.com/locate/procedia)

Symbiosis Institute of Management Studies Annual Research Conference (SIMSARC13)

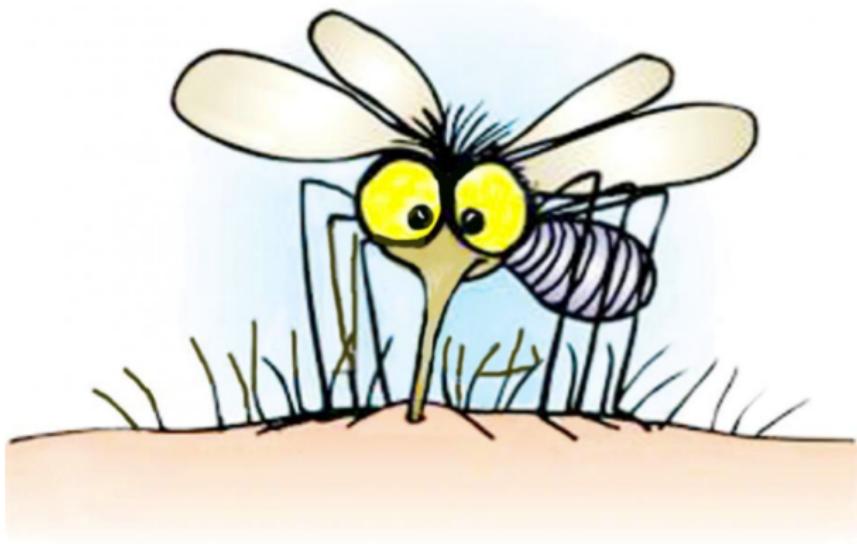
## **Workforce Diversity: A Key to Improve Productivity**

Ankita Saxena<sup>a\*</sup>

# Cuales son los mitos?

- ▶ No hay Prejuicio
- ▶ Las Mujeres no tienen Ambición
- ▶ Mujeres no gustan de la ciencia
- ▶ Es una cuestión de tiempo

# No hay Prejuicio



# Esteriotipos de Genero y Inteligencia

Bian, Leslie, Cimpian, Science 55 (207)

## Science

Home News Journals Topics C

### 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.ahh6524



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# Prejuicio en Ciencia - Final de carrera

Goyerter, Science 2018

Science Home News Journals Topics Careers

university of groningen

10 Professor positions in Cognitive Systems and Materials

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ROBERT NEUBECKER

My career seemed to hit a wall. Now I see that it was discrimination

By Sharon Ramos Goyette | Jun. 14, 2018, 2:00 PM

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# Prejuicio en Ciencia - Evaluación

Handley, Brown, Moss-Racusin, Smith PNAS 2015



## Quality of evidence revealing subtle gender biases in science is in the eye of the beholder

Ian M. Handley<sup>a,1</sup>, Elizabeth R. Brown<sup>a,b</sup>, Corinne A. Moss-Racusin<sup>c</sup>, and Jessi L. Smith<sup>a</sup>

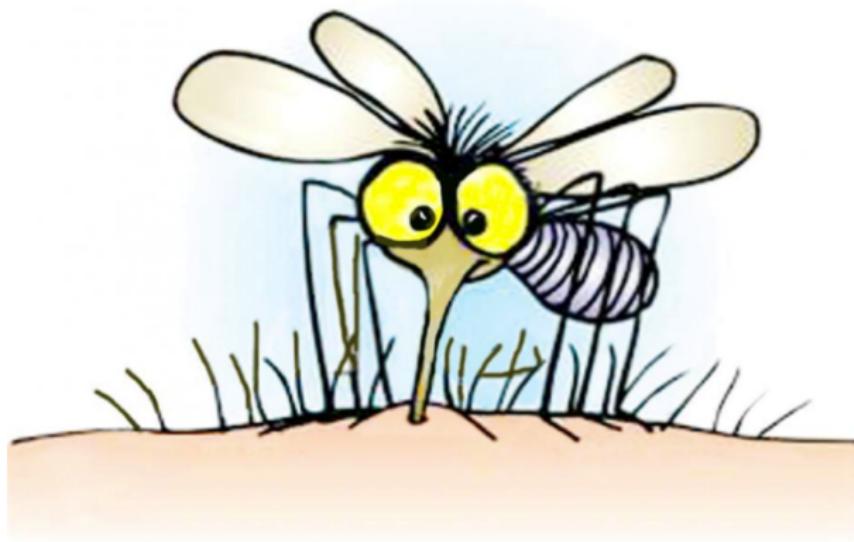
<sup>a</sup>Department of Psychology, Montana State University, Bozeman, MT 59717-3440; <sup>b</sup>Department of Psychology, University of North Florida, Jacksonville, FL 32244; and <sup>c</sup>Department of Psychology, Skidmore College, Saratoga Springs, NY 12866

Edited by Susan T. Fiske, Princeton University, Princeton, NJ, and approved September 16, 2015 (received for review May 31, 2015)

**Scientists are trained to evaluate and interpret evidence without bias or subjectivity. Thus, growing evidence revealing a gender**

position (10) and selection for a mathematical task (11), evaluations of conference abstracts (12), research citations (13), symposia-

# Mujeres no tienen ambición

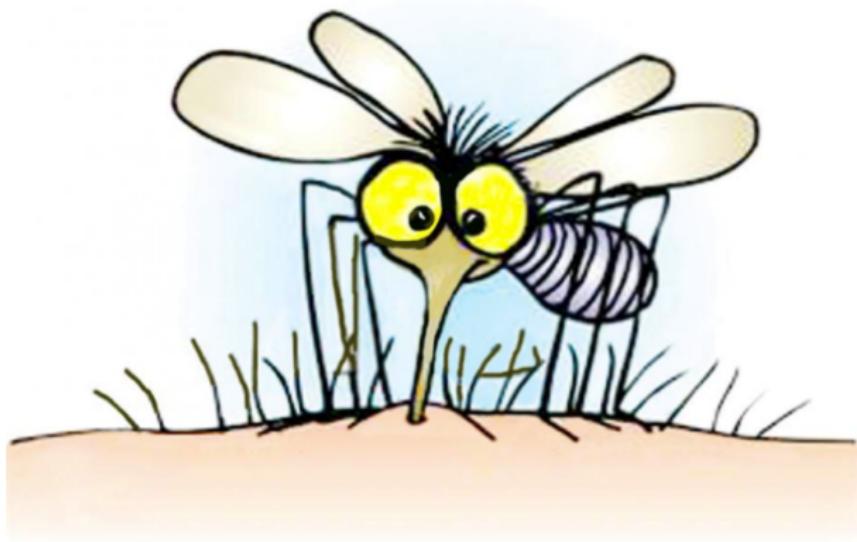


# Mujeres no tienen ambición

Abouzahr, Krentz, Taplett, Tracey and Tsusaka, BCG 2017

The image is a screenshot of a BCG (Boston Consulting Group) website page. At the top, there is a dark blue header bar with the BCG logo and the text "Mujeres no tienen ambición" and "Abouzahr, Krentz, Taplett, Tracey and Tsusaka, BCG 2017". Below the header, the main content area has a white background. On the left side, there is a vertical sidebar with a green header containing the BCG logo, a menu icon (three horizontal lines), and a search icon. The main content area features a title "Dispelling the Myths of the Gender “Ambition Gap”" in bold black text, followed by a subtitle "RELATED EXPERTISE". Below the subtitle is a large, bold, black title: "Dispelling the Myths of the Gender “Ambition Gap”". Underneath the title, there is a date "APRIL 5, 2017" and a byline "By Katie Abouzahr, Matt Krentz, Frances Brooks Taplett, Claire Tracey, and Miki Tsusaka". To the left of the title, there is a small thumbnail image of a red, textured object, possibly a piece of fruit or a decorative item, resting on a surface. The overall layout is clean and professional, typical of a corporate website.

# Mujeres no gustan de la ciencia



# Hipatia(ca. 351-370)



# Marie Curie (1867-1934)



# Lise Meitner (1878-1968)



# Mary Cartwright (1900-1998)



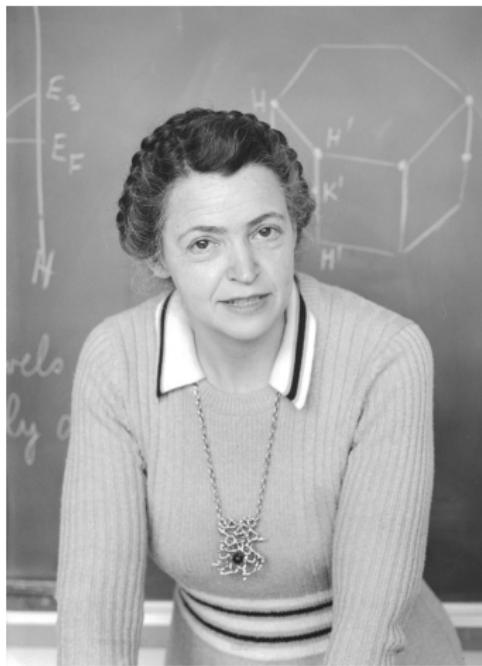
# Maria Mayer (1906-1972)



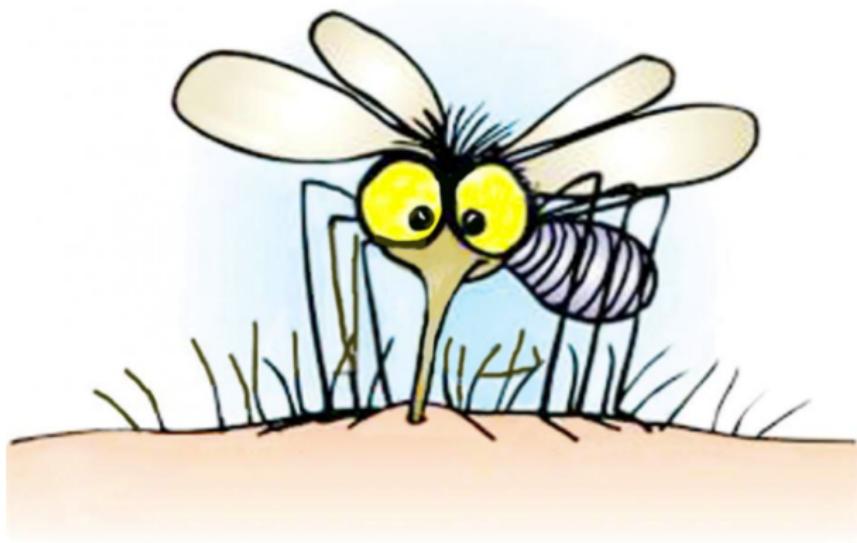
# Rosalyn Sussman Yallow(1921-2011)



# Mildred Dresselhaus (1930-2017)

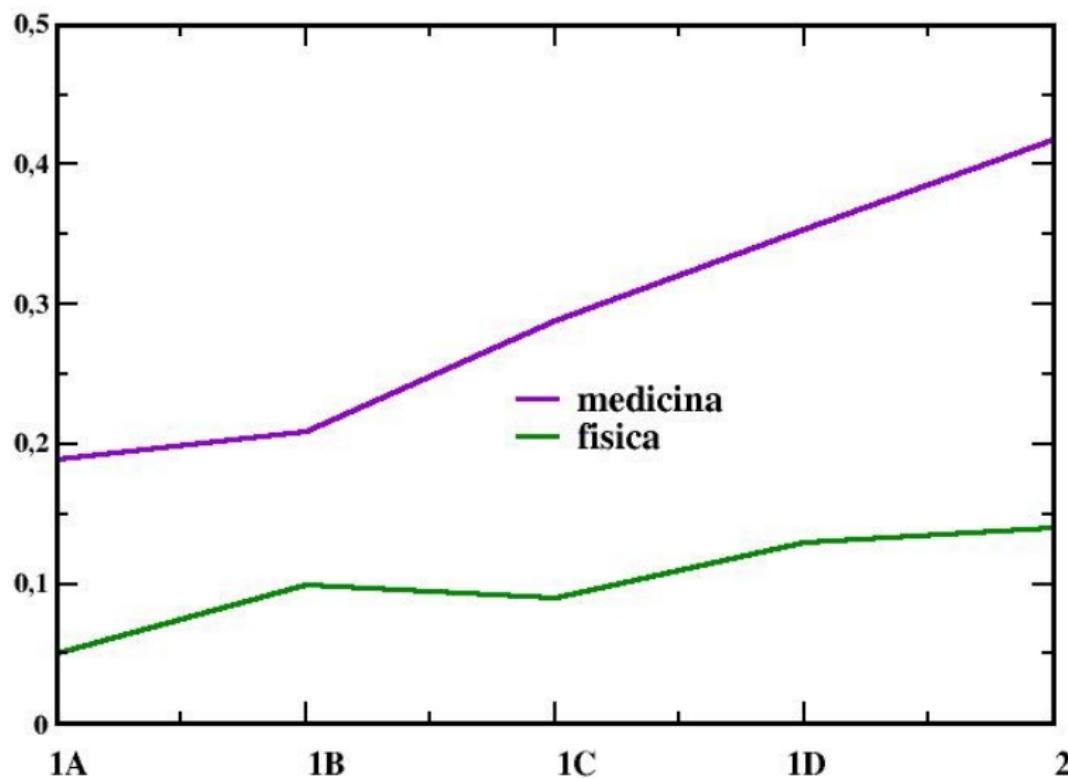


Es una questin de tiempo

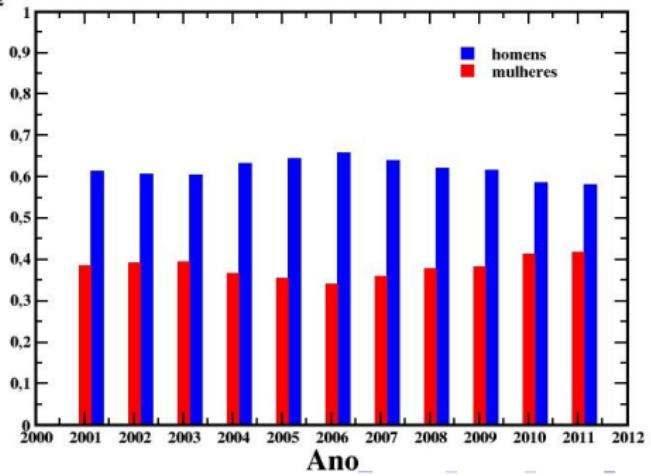
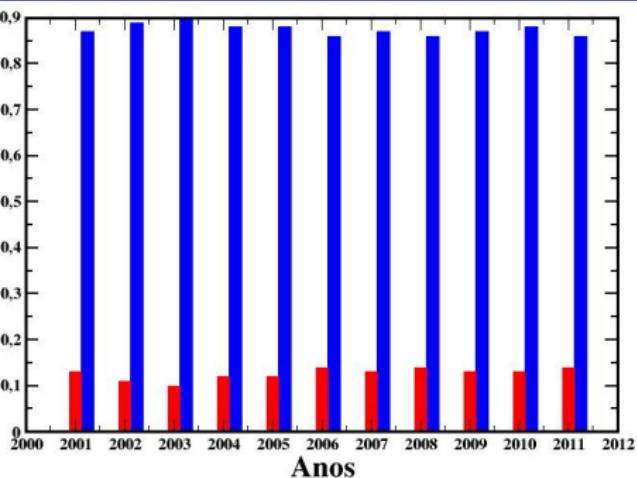


# Es una questin de tiempo

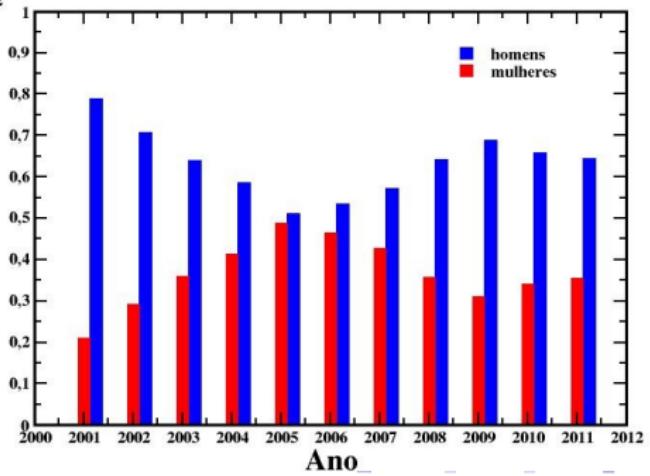
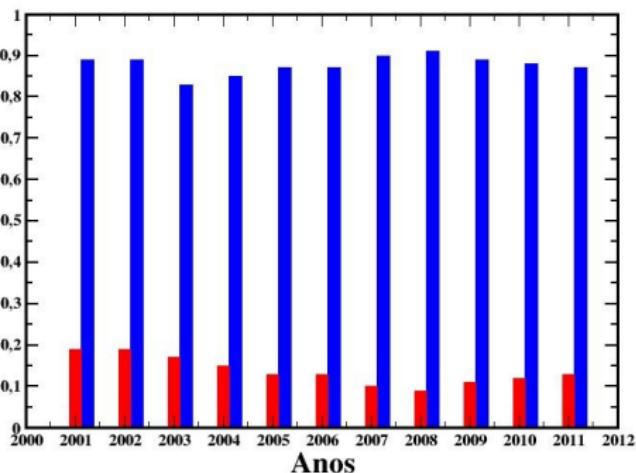
Betina Lima, MCB, In: Trabalho e Gênero, 2013



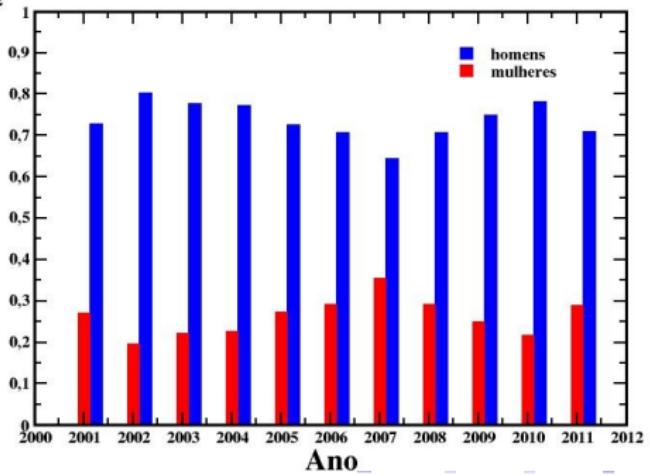
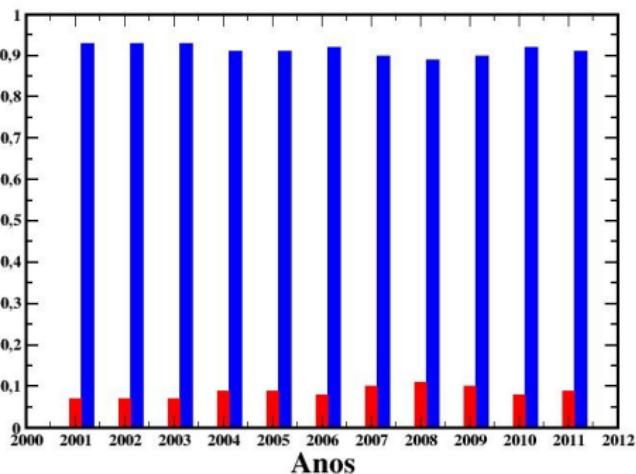
# Fisica y Medicina - PQ 2



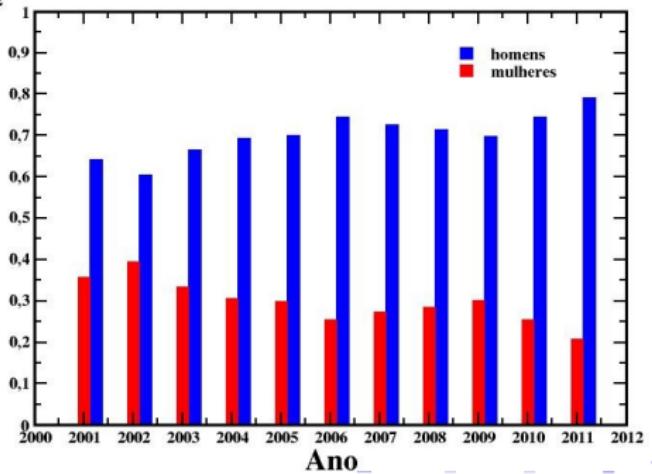
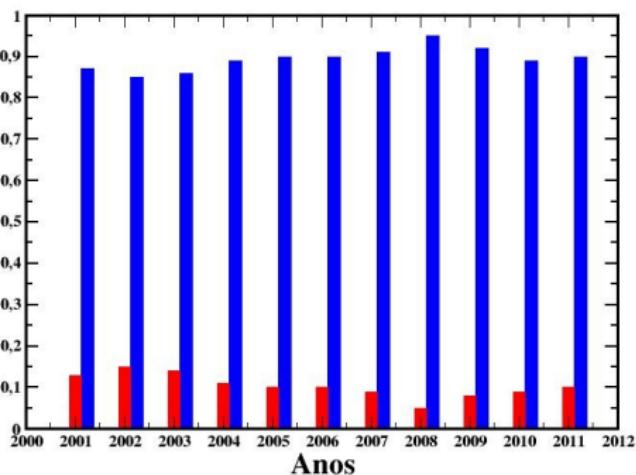
# Fisica y Medicina - PQ 1D



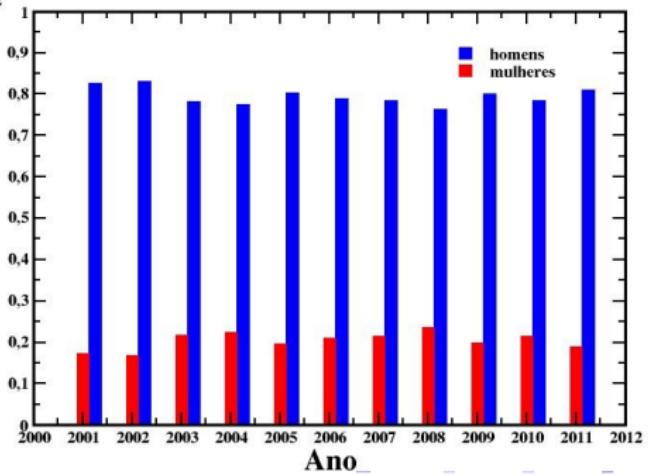
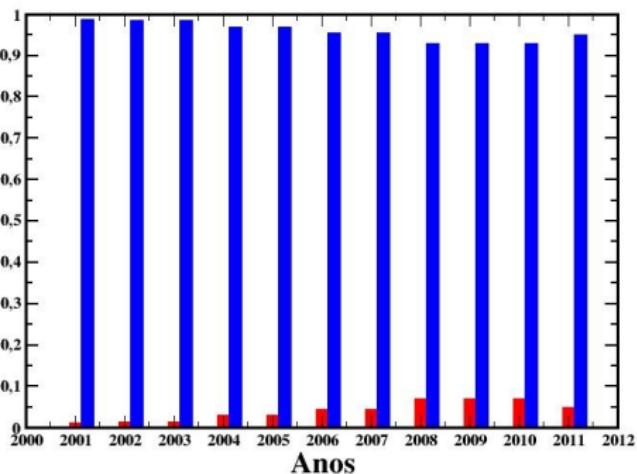
# Fisica y Medicina - PQ 1C



# Fisica y Medicina- PQ 1B

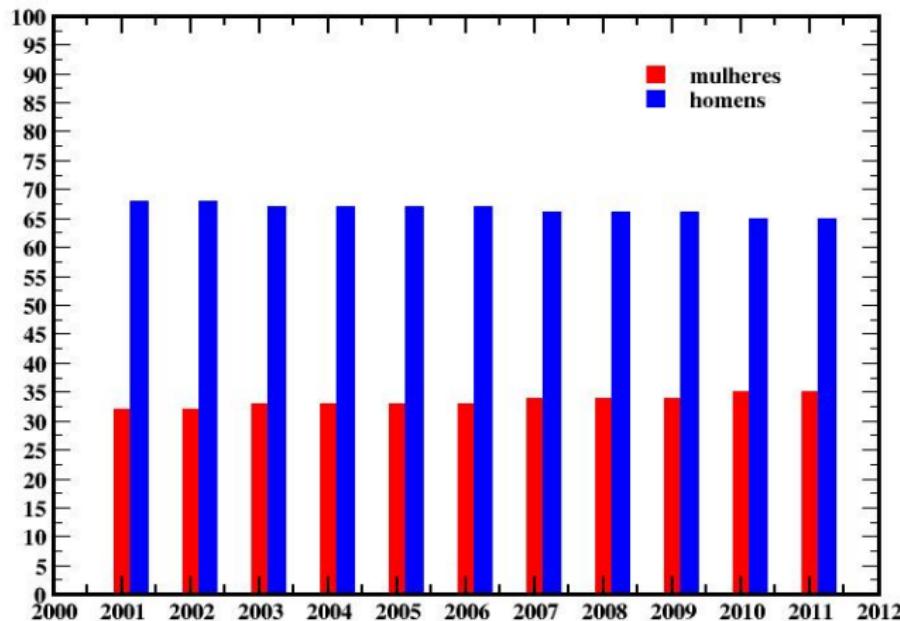


# Fisica y Medicina- PQ 1A



# Investigadores

Betina Lima, MCB, In: Trabalho e Gênero, 2013

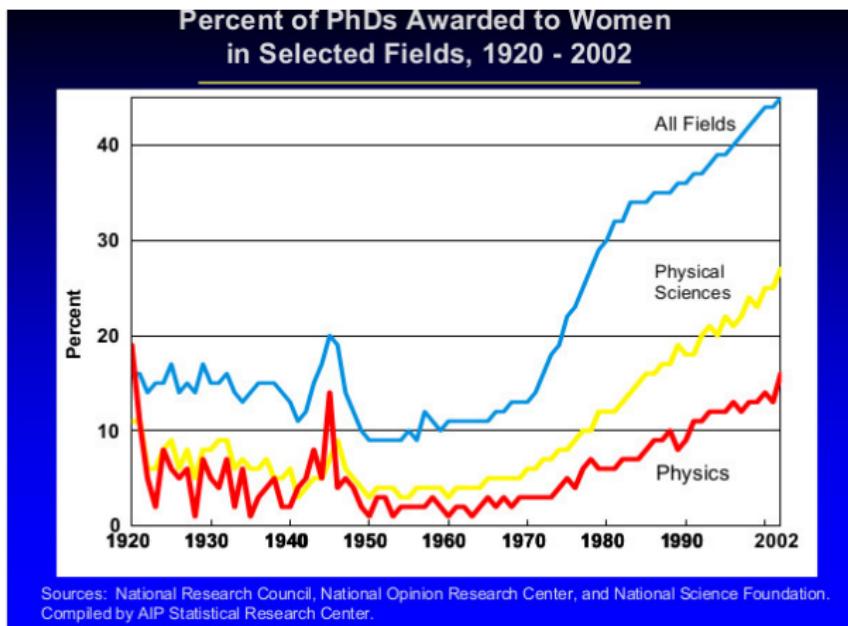


## O que hacer?



# O que hacer?

USA, 2002



# O que hacer? IUPAP 2002



PIONEIRAS



DA CIÊNCIA

NO BRASIL





Comissão de Gênero  
Sociedade Brasileira de Física





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DE MENINAS A FAZER A  
EXPERIÊNCIA PORQUE NÉ,  
SÃO MENINAS."



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# Conclusiones

- ▶ Arrume os DADOS
- ▶ Arrume as INSTITUICIONES
- ▶ Arrume a CIENCIA

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**LUTO  
PRA MIM É VERBO!**