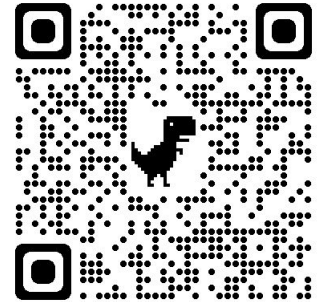


Gender differences in the aims and impacts of research

[Lin Zhang](#) , [Gunnar Sivertsen](#), [Huiying Du](#), [Ying Huang](#) & [Wolfgang Glänzel](#)

[Scientometrics](#) **126**, 8861–8886 (2021) | [Cite this article](#)



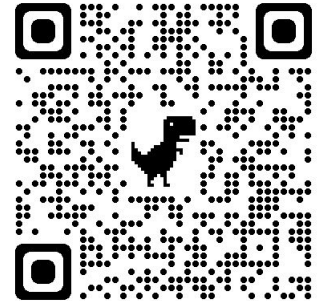
- Male researchers more often value and engage in research mainly aimed at scientific progress, which is more cited.
- Female researchers more often value and engage in research mainly aimed at contributing to societal progress, which has more abstract views.
- Our findings have implications for evaluation and funding policies and practices.

Women are credited less in science than men

[Matthew B. Ross](#), [Britta M. Glennon](#), [Raviv Murciano-Goroff](#), [Enrico G. Berkes](#), [Bruce A. Weinberg](#) &

[Julia I. Lane](#) 

[Nature](#) **608**, 135–145 (2022) | [Cite this article](#)



- There is a well-documented gap between the observed number of works produced by women and by men in science.
- Women in research teams are significantly less likely than men to be credited with authorship [unacknowledged contributions].
- The gender gap is present across most scientific fields and almost all career stages.
- The reason that women are less likely to be credited is because their work is often not known, is not appreciated or is ignored.

Exclusionary Behaviors Reinforce Historical Biases and Contribute to Loss of Talent in the Earth Sciences

Erika Marin-Spiotta ✉, Emily J. Diaz-Vallejo, Rebecca T. Barnes, Allison Mattheis, Blair Schneider, Asmeret Asefaw Berhe, Meredith G. Hastings, Billy M. Williams, Vicki Magley

First published: 23 February 2023 | <https://doi.org/10.1029/2022EF002912>



- Geosciences remain one of the least diverse fields.
- Scientists of color, women and non-binary individuals, scientists with disabilities, and LGBTQPA+ scientists more frequently experienced negative interactions, including interpersonal mistreatment, discriminatory language, and sexual harassment.
- A majority of geoscientists reported avoiding their colleagues and almost a third considered leaving their institution or a career change.

A Global Survey on the Perceptions and Impacts of Gender Inequality in the Earth and Space Sciences

Andrea L. Popp ✉, Stefanie R. Lutz ✉, Sina Khatami, Tim H. M. van Emmerik, Wouter J. M. Knoben

First published: 08 August 2019 | <https://doi.org/10.1029/2019EA000706>

Andrea L. Popp and Stefanie R. Lutz contributed equally to this work

- The *leaky pipeline* phenomenon refers to the disproportionate decline of female scientists at higher academic career levels and is a major problem in the natural sciences.
- Given the male dominance in senior career levels, our results emphasize that those feeling less impacted by the negative consequences of gender bias and imbalance are the ones in position to tackle the problem.



How well-intentioned white male physicists maintain ignorance of inequity and justify inaction

[Melissa Dancy](#) ✉ & [Apriel K. Hodari](#)

[International Journal of STEM Education](#) **10**, Article number: 45 (2023)



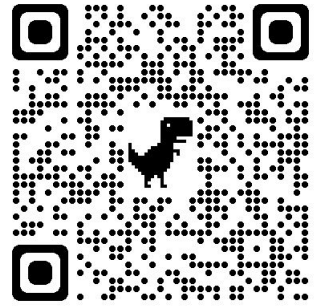
- White cis men dominate most STEM fields and are particularly overrepresented in positions of status and influence
- We present and discuss three overarching themes demonstrating how highly educated, well-intentioned people of privilege maintain their power and privilege despite their own intentions: (1) denying inequity is physically near them; (2) locating causes of inequity in large societal systems over which they have little influence; and (3) justifying inaction.

Towards women-inclusive ecology: Representation, behavior, and perception of women at an international conference

Anna Lupon , Pablo Rodríguez-Lozano, Mireia Bartrons, Alba Anadon-Rosell, Meritxell Batalla, Susana Bernal, Andrea G. Bravo, Pol Capdevila, Miguel Cañedo-Argüelles, Núria Catalán, Ana Genua-Olmedo, Cayetano Gutiérrez-Cánovas, Maria João Feio, [...],Ada Pastor [view all]

Published: December 10, 2021 • <https://doi.org/10.1371/journal.pone.0260163>

- Women's participation in an ecology conference (SIBECOL)
- The gender of attendees and presenters was balanced (48/52% women/men). Men presented most of the keynote tal convened most of the sessions.
- Our results also showed that only 32% of the questions were asked by women, yet the number of questions raised by women increased when the speaker or the convener was a woman.

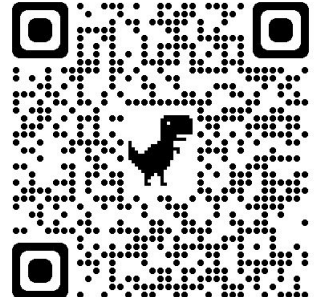


Climate for women in climate science: Women scientists and the Intergovernmental Panel on Climate Change

[Miriam Gay-Antaki](#)  and [Diana Liverman](#) [Authors Info & Affiliations](#)

Edited by Susan Hanson, Clark University, Worcester, MA, and approved January 17, 2018 (received for review June 6, 201

February 12, 2018 | 115 (9) 2060-2065 | <https://doi.org/10.1073/pnas.1710271115>



- The proportion of female IPCC authors has seen a modest increase from less than 5% in 1990 to more than 20% in the most recent assessment reports.
- Not all women experience the same obstacles: they face multiple and diverse barriers associated with social identifiers such as race, nationality, command of English, and disciplinary affiliation.
- The scientific community benefits from including all scientists, including women and those from the Global South.

Stories from the IPCC: An essay on climate science in fourteen questions

Miriam Gay-Antaki

Global Environmental Change

Volume 71, November 2021, 102384



- Gender, race and nationality continue to be barriers.
- I stress the connection between exclusions of underrepresented scientists in the IPCC with the persistent western belief that science is an objective and impartial practice.
- As climate science becomes more diverse, and evidence points toward the benefit of diversity for superior science, understanding barriers and opportunities for scientists participating in multidisciplinary and international reports such as the IPCC becomes increasingly important.