

Progress Toward Gender Equality in Research & Innovation — 2024 Review

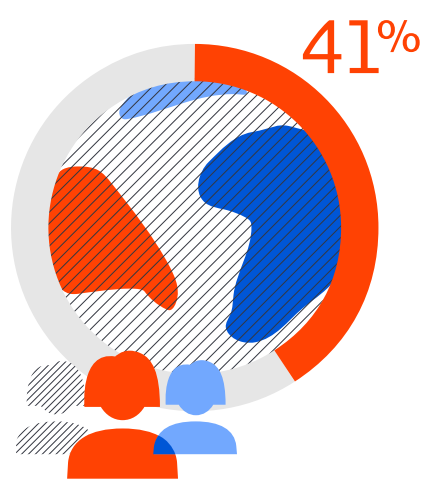
An in-depth analysis of research participation, career progression and research contributions across the globe.

Elsevier's comprehensive analytics report provides a significant new evidence base exploring the contributions made by women researchers across two decades and 20 countries and regions.

Representation

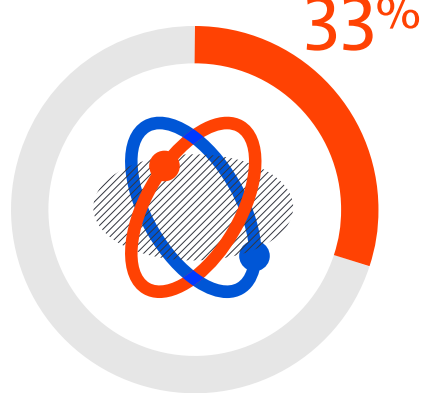
Women's research participation is on the rise but a large gap remains

Women make up 41% of all active researchers globally.



Physical Sciences

Representation of women is 33%.



Variance across career stage and discipline

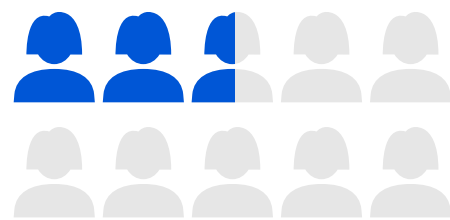
Early-career women researchers participate to an almost equal extent to men when looking at all disciplines of research, but this declines when looking at senior cohorts and STEM subjects.

STEM disciplines

In STEM disciplines, women's representation in the early-career cohorts is 42%. However it falls to 26% for advanced-career.



EARLY-CAREER — 42%



ADVANCED-CAREER — 26%

Progress towards parity

In STEM fields, women's representation is still well below parity.

COMPUTER SCIENCE



ENERGY



ENGINEERING



PHYSICS & ASTRONOMY



MATHEMATICS



Citation



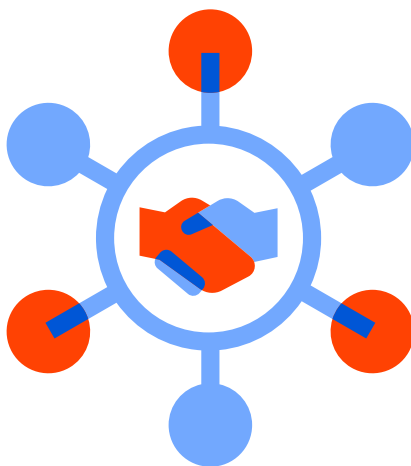
Women more likely to be quoted outside of the academic world

Women's progress is especially marked when assessed using indicators around societal impact, with their research more likely than men's to be cited in policy documents and media.

UN Sustainable Development Goals (SDGs)

Women's research impact strong in UN SDG areas

Women comprise the majority of active researchers working on some United Nations Sustainable Development Goals, including education (SDG 4), gender equality (SDG 5), reduce inequalities (SDG 10) and peace and justice (SDG 16).



Women high in multidisciplinary and collaboration

Women engage in more multidisciplinary research than men for 10 of the 17 SDGs. Women authors also produce more multidisciplinary publications across most fields of science.

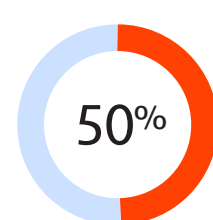
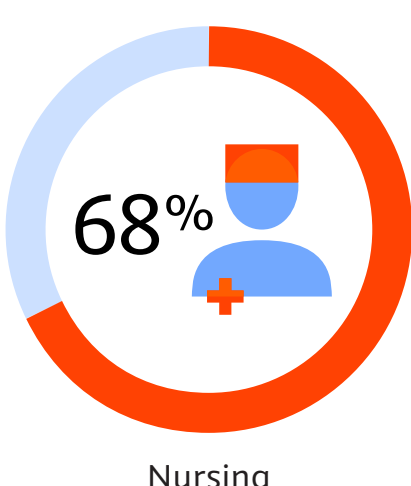
"I was just so taken aback by the Gender Report's scope, depth, breadth, thoughtfulness, and potential for real impact. It can lead to real culture change within institutions and funding agencies to in turn benefit individual researchers of all genders throughout their careers."

— **Dr. Hannah Valentine**
Professor of Medicine, Stanford University and member of Elsevier's I&D Advisory Board

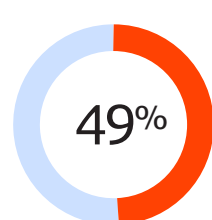
Research Fields

Women strong in health disciplines

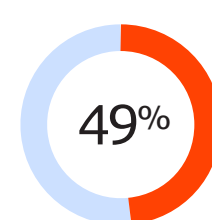
Women very well represented across Health Sciences.



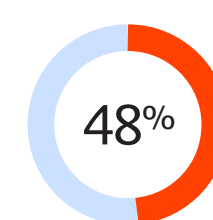
Neuroscience



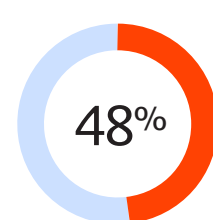
Pharmacology, Toxicology & Pharmaceuticals



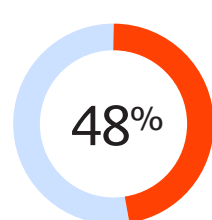
Social Sciences



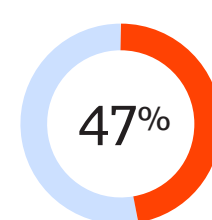
Veterinary



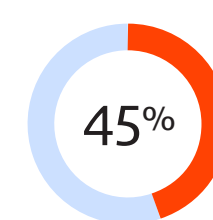
Medicine



Biochemistry, Genetics & Molecular Biology



Health Professions

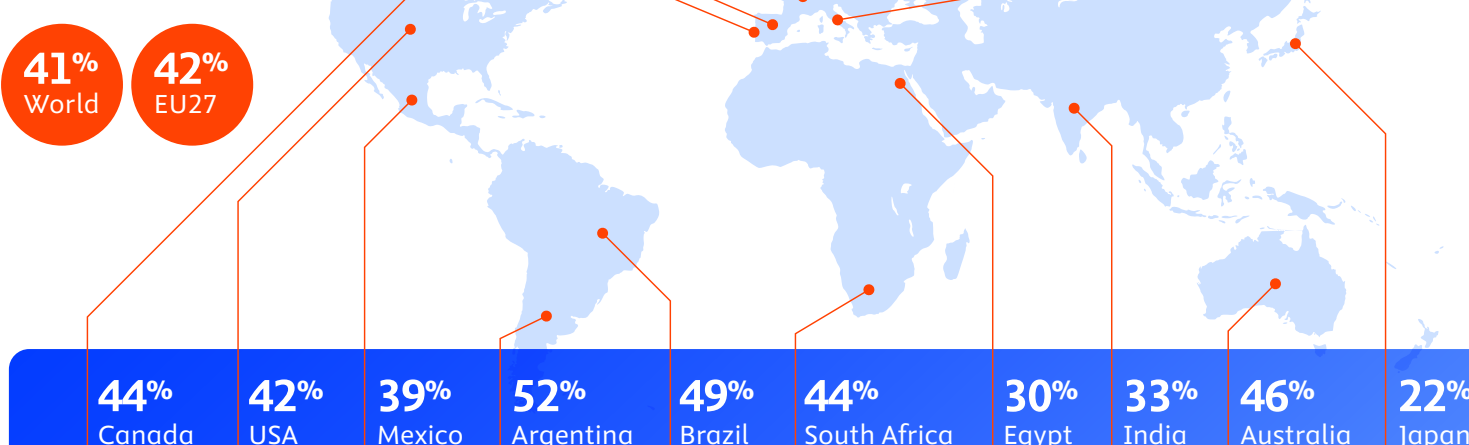


Dentistry

Participation

Participation varies between regions

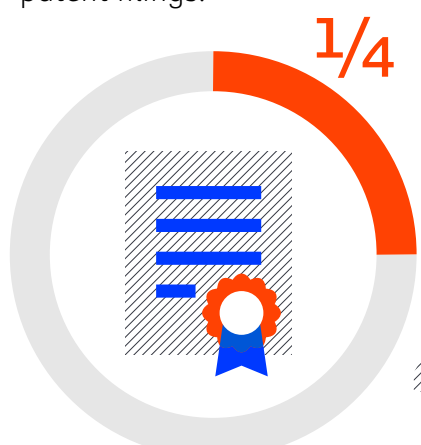
Percentage of active researchers that are women.



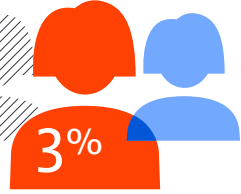
Patents

Patents remain low for women

Translation of research into innovation is lower for women, with 3/4 of patent applications being filed by men-only teams — women are involved in 26% of all patent filings.



3% are filed by women-only teams.



Grants

Grants for women growing steadily

Overall, the average share of women among awardees increased from 29% in 2009, to 37% in 2022. But for most countries, gains in grant awards to women were not strong enough to keep pace with the rise in the proportion of women active researchers.



Largest percentage point increases were for:

- +19 The Netherlands
- +13 Denmark
- +12 United Kingdom
- +10 France
- +10 Canada
- +8 Portugal

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elsevier.com/gender-and-diversity-in-research

*Analysis excludes China due to availability of data

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