

Florence Bell died unrecognized for her DNA contributions—decades on, female researchers are still being sidelined

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Almost 80 years ago, Florence Bell quietly laid the foundations for one of the biggest landmarks in 20th century science: the discovery of the structure of DNA. But when she died on November 23 2000, her occupation on her death certificate was recorded as "housewife."

Decades later, female researchers are [still being sidelined](#). Research has shown that deep systemic problems [block women from advancing](#) or push them out of science. But this isn't inevitable—there are changes universities could make to level the playing field.

While promotion criteria differ across universities, [credibility in academia](#) is primarily established through the number of publications a researcher has authored. This means academics are under pressure to publish as much as they can even if quality suffers.

Women in academia are [more likely to work part time](#), hold teaching jobs and do extra admin tasks. This means [women](#) researchers often get less time to focus on their research, to make discoveries, and publish about them. Yet it is research publications, grants, and citations that are used in promotions and salary negotiations.

The [gender disparity](#) is apparent through [men's higher publication rates](#), and [men's dominant representation](#) in academia research journal editorships.

Why the problem isn't going away

The cycle of gender disparity in academia is complex. Larger grants often [go to larger universities](#), where researchers can prioritize writing and research. And historically, the recipients of prestigious positions and important grants have been men.

In some fields, for example, the STEM field, women exit the workforce at [double the rate of men](#), often due to the biases, harassment, and inequities they encounter. A woman I interviewed for [research about the issue](#) revealed that her pregnancy was viewed negatively by her senior colleagues, which resulted in her role being replaced without maternity leave. She said she felt like she had to choose between her career and

having a baby.

The gender bias becomes even more pronounced for women from marginalized backgrounds. This includes women with working-class origins, those with disabilities, those from minority [ethnic groups](#) in their country of work, and those for whom English is not their first language.

For example, in a survey of [908 environmental science researchers](#), non-native English speakers, especially those early in their careers, said they spent more time on reading and writing papers, preparing English presentations and disseminating research in multiple languages.

In our book [Inspirational Women in Academia](#), Loleta Fahad (head of career development at University College London) and I explored how women from marginalized backgrounds bear the brunt of double disadvantages, often exacerbated by well-intentioned but poorly executed solutions implemented by the university system.

We found that high-achieving women from underrepresented backgrounds are often assigned mentorship and representative roles, for example. Universities typically don't provide extra time for these mentorship roles. It is expected that these high-achieving women "pay it forward" to the community they came from. A woman feels a duty to represent her group and mentor other women, but this responsibility diverts time from the very tasks that brought her recognition in the first place.

Consequently, burnout rates can be higher among women from marginalized backgrounds—[a trend documented](#) among female medical professionals with marginalized identities.

Yet research suggests that the most enriching mentorships happen when people are mentored by [someone from a different background](#) than

them. For instance, a woman we [interviewed for our book](#), said that her career benefited most from conversations with successful male academics, not women facing the same challenges as her.

While the tough research environment has cultivated a resilience that enables many women to prevail against considerable challenges, their success often entails personal and professional sacrifices.

I achieved success early in my career partly because of the additional hours I invested. I worked twice as hard, including at night and on weekends. My story, [featured in Nature](#), garnered widespread attention because my account of overwork echoed the experiences of many others.

Indeed, the [most accomplished female academics](#) in psychology report working over 50 hours a week. Their routines typically involve starting the day early, working into the evening and dedicating weekends to writing. Women who want to succeed typically need to put in more effort, especially in some male-dominated fields where there is still an old boy's club culture making it harder for women to get promoted.

For emerging academics in particular, there is a concerning notion that those who prioritize research above all else are the scholars who succeed, potentially at the expense of their health. Those from marginalized backgrounds run an even higher risk of burnout.

There is a way forward

Universities can make changes to promote equality. For example, giving equal credit and respect for teaching as they do for publications. The time spent on mentoring, contributions to [public debate](#), or work with communities should also be considered as equal measures of success, promotion and respect for academics. Without such systemic reforms, the scientific community risks losing the diverse perspectives that

female scientists bring.

Florence Bell wasn't the only woman who laid the groundwork for our understanding of DNA. In April 2023, historic papers were discovered showing Rosalind Franklin's contributions were more important than we realized. Imagine what other discoveries Franklin and Bell may have helped make had they been properly supported and recognized. Holding back female researchers limits our understanding of science.

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