

Brazilian budget cuts further threaten gender equality in research

To the Editor — On 8 October 2021, a budget cut was decreed, reducing Brazil's National Fund for Science and Technology Development budget by 92%. As most Brazilian higher education and research is performed at public universities, funded by state and national resources, these cuts are a blow to the career prospects of Brazilian researchers, especially early-career scientists without permanent employment¹. Implicit biases in funding allocation are likely to exacerbate the situation for women and other under-represented groups, reinforcing a poorly diversified academic structure².

Grant decisions can already be biased against women^{3,4}. In Brazil, the broadest science funding agency devoted primarily to research funding is the National Council for Scientific and Technological Development (CNPq), in which we can evidence gender gaps in success rate. CNPq offers a form of research grant called a research productivity fellowship, which aims to recognize outstanding researchers, valuing their scientific output according to normative criteria. We found that in the most recent call (in 2020) men were responsible for most of the applications and had a greater success rate than women (35.0%, compared to 29.5%)⁵. For another grant, related to post-doctoral level, despite more female researchers submitting fellowship proposals (CNPq grant number 16/2020), their approval rate was again lower (6.1%, compared to 8.8%)⁶. These patterns add to gender imbalances identified in previous years of CNPq funding calls⁷.

Increased competition for limited funding threatens to filter for traditionally privileged people and those with existing stability, such as senior professors (often white men).

Thus, budget cuts may have a larger impact on women and other under-represented groups, such as people who are mothers, Black, Indigenous, LGBTQIA+ or who have disabilities⁸, exacerbating Brazil's leaky academic pipeline^{7,8}. For example, women in Brazilian entomology (data from 2004 to 2019) obtained more bachelor's and master's degrees, but these are not followed by equivalent attainment of permanent jobs, with the leakiest point being after the post-doctoral level⁸. Some of the reasons women leave academia are the disproportionate access to resources (for example, jobs, opportunities, research grants) and the lesser recognition of scientific discoveries⁹, which get stronger with less resources. By contrast, male researchers frequently benefit from in-group favouritism at each academic stage, culminating in higher representation in positions of power and prestige, such as membership of editorial boards, scientific committees and the Brazilian Academy of Science^{7,8,10}.

With the latest budget cuts, instead of focusing on strategies to achieve gender equity in Brazilian science, we are taking a big step back, losing scientists trained and qualified with taxpayers' money. This brain drain will likely take decades to reverse¹¹, particularly as it is compounded with the deepening of minority gaps due to the COVID-19 pandemic^{12,13}. Reversing the budget cuts and ensuring equitable allocation of research funding are paramount not only to reignite Brazilian science but also to advance towards an inclusive and diverse academic environment, which can have direct impacts on environmental science and conservation. □

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Competing interests

The authors declare no competing interests.