

## The reality of sex

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We write as medical and biological professionals who are increasingly concerned with how commercial and corporate interests of publishers are being allowed to unduly influence intellectual discourse, especially in relation to biological sex. We represent a variety of backgrounds, with interests ranging from male-lethal genetic disorders in humans to sex behaviours in invertebrates. Human sex is an observable, immutable, and important biological classification; it is a fundamental characteristic of our species, foundational to many biology disciplines, and a major differentiator in medical/health outcomes.

Public discourse around sex increasingly seeks to deny basic facts of human biology. One recent example has been the treatment of Suzanne Moore at The Guardian following her attempts to discuss sex-related issues (<https://unherd.com/2020/11/why-i-had-to-leave-the-guardian/>). This denialism is no longer confined to humanities departments and social media hashtags, but has made inroads into mainstream culture, in part due to a highly sympathetic media environment. Of particular concern to us is the sight of respected scientific publications, such as *Nature*, now beginning to echo these popular trends. In a recent article discussing a research study of differential disease burden in male and female patients with cystic fibrosis, the following disclaimer was inserted: “*Nature* recognizes that sex and gender are not the same, and are neither fixed nor binary” (Healey, 2020). The Chief Supplements Editor of *Nature* has confirmed that it is the journal’s policy to add such disclaimers (Herb Brody, personal communication).

We regard the claim that sex is neither fixed nor binary to be entirely without scientific merit – there are two sexes, male and female, and in humans sex is immutable (disorders of sexual development are very rare and, in any event, do not result in any additional sexes). Such politically motivated policies and statements have no place in scientific journals. It is essential that impartiality be maintained in order to preserve public trust in science as a process dedicated to producing shared knowledge.

We call upon authors and editors to resist non-scientific pressures to suppress honest and accurate discussion of these matters, particularly in the field of medicine where diagnosis, prognosis and treatment can depend on a patient’s sex.

Healey, N. (2020). The gender gap in cystic fibrosis. *Nature*, 583, S10.

