

3Qs: Gender balance in biomedical research

May 30 2014, by Angela Herring



A new policy from the National Institutes of Health will require all biomedical research funded by the NIH to be gender balanced. Here, Rebecca Shansky, an assistant professor of psychology whose research is focused in this space, discusses the implications of the decision. Credit: Kristie Gillooly.

Earlier this month the National Institutes of Health announced that going forward all biomedical research funded by the NIH must represent a balanced sample of both male and female test subjects. We asked Northeastern assistant professor of psychology Rebecca Shansky, who has already taken this approach in her research for more than a decade,

to discuss the implications this decision could have for the field.

Why is it important to maintain a gender balance in biomedical research?

The primary goal of [biomedical research](#) is to improve people's lives through a better understanding of how our bodies [work](#). But there are a lot of ways in which male and female bodies work differently.

Biomedical research often leads to drug development, but if that drug has only been tested in male laboratory animals and men in clinical trials, how do we know it will work the same in women? Men and women may metabolize some drugs differently, which is an important consideration in dosage prescription. This was actually the case with Ambien—prescriptions were being made for both men and women based on research that had been done exclusively in males. It wasn't until it had been on the market for more than a decade that researchers and physicians realized that women should be taking half the dose that men do.

What specific gender questions are you exploring in your work, and will your work be affected by the new rules?

My research investigates [sex differences](#) in how the brain responds to stressful situations. We study the learning and memory processes that go along with trauma exposure, and we ask whether sex differences in behavior are related to structural changes in the brain. Since we already have a long history of studying sex differences, this new mandate will probably not affect our day-to-day operations very much. The biggest thing that would probably change is that we'd suddenly have a lot more competition.

What are the terms of the new NIH rules, and how will they affect biomedical research?

The terms have not been explicitly laid out yet, but the NIH has said that it is "developing policies" to rectify the imbalance of male vs. female biomedical research. This probably means that when deciding which grants to fund, the NIH will take into consideration whether researchers have proposed an experimental design that includes both sexes. It also probably means that the NIH will check to see that both males and females were used in forthcoming work that was funded by NIH. At its most rigorous, all researchers at any level—all the way down to cell culture—could be required to conduct their experiments in both males and females and sufficiently power their experiments to be able to look for [gender differences](#). This would undeniably be very expensive and time consuming, which is why most people do not study sex differences already.

Provided by Northeastern University

Citation: 3Qs: Gender balance in biomedical research (2014, May 30) retrieved 3 July 2024 from <https://phys.org/news/2014-05-3qs-gender-biomedical.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--