Gender gaps remain for many women scientists, study finds

May 20 2024, by Sherri Buri McDonald

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As more women have entered the biomedical field, they're getting a bigger share of research grants, and the gender gap in research funding appears to be narrowing, but the gains have been uneven.

That's because, at U.S. universities, most of those research dollars are going to senior women scientists, and their younger counterparts are missing out on the large grants that can advance science and careers, according to a new study by a University of Oregon researcher and collaborators.

Their findings were published May 17 in *Nature Biotechnology*.

"As the resources are increasingly flowing toward women, the disparity between senior men scientists and senior women scientists is closing," said co-author Chris Liu, an associate professor of management with the UO's Lundquist College of Business. "But the gap is persisting between junior men and women."

Liu collaborated with Andy S. Back, assistant professor in management and strategy at the University of Hong Kong Business School, and two researchers at the University of Maryland's Robert H. Smith School of Business: Waverly Ding, associate professor of management and organization, and Beril Yalcinkaya, a doctoral candidate in strategic management and entrepreneurship.

They examined the distribution of 2.3 million U.S. National Institutes of Health grants to biomedical scientists from 1985 to 2017.

Also, the researchers were struck by the contrast between two different sets of data. The first shows a steady climb in the percentage of life sciences doctoral degree recipients who are women, from roughly 30% in 1985 to 55% in 2020.

The second shows a persistent gender gap in the probability of holding a full-time tenured academic position in biomedicine. For the past three decades, the probability has been about 20% for women and nearly 40% for men.

"This is an important trend that has been overlooked," Liu said. "To fully realize the benefits of diversity, it is important that disadvantaged groups achieve the academic freedom afforded by grant funding and tenure. Our study reveals a systemic issue that needs to be addressed for young women scientists to advance through the ranks and have the greatest possible impact on science and society."

Possible solutions could include earmarking research funding for young women scientists and offering grant-writing assistance and other supports, Liu said.

More information: Christopher C. Liu et al, The impact of gender diversity on junior versus senior biomedical scientists' NIH research awards, *Nature Biotechnology* (2024). DOI: 10.1038/s41587-024-02234-y

Provided by University of Oregon