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## INTRODUCTION

Science is at the forefront of diversity, equity, and inclusion yet wide disparities continue to exist in the field today. Science is a field where different backgrounds, experiences, and expertise are critical for progression to persist. Studies on this particular topic have been done. One such study, Silva et. al. (2020), examines gender differences in NIH grant funding in neurological surgery finding that 79.4% of all NIH grants were awarded to males in the field. Science, a field with women deeply interlocked in its history and future, has shown a historic exclusion of women in its funding. Grants and funding have also been shown to be concentrated in certain regions of the country such as those harboring universities historically known to have prestige. Therefore, the basis of this study was to find gender and regional disparities among members of a specific committee that reviews and selects grant recipients.

## METHODS

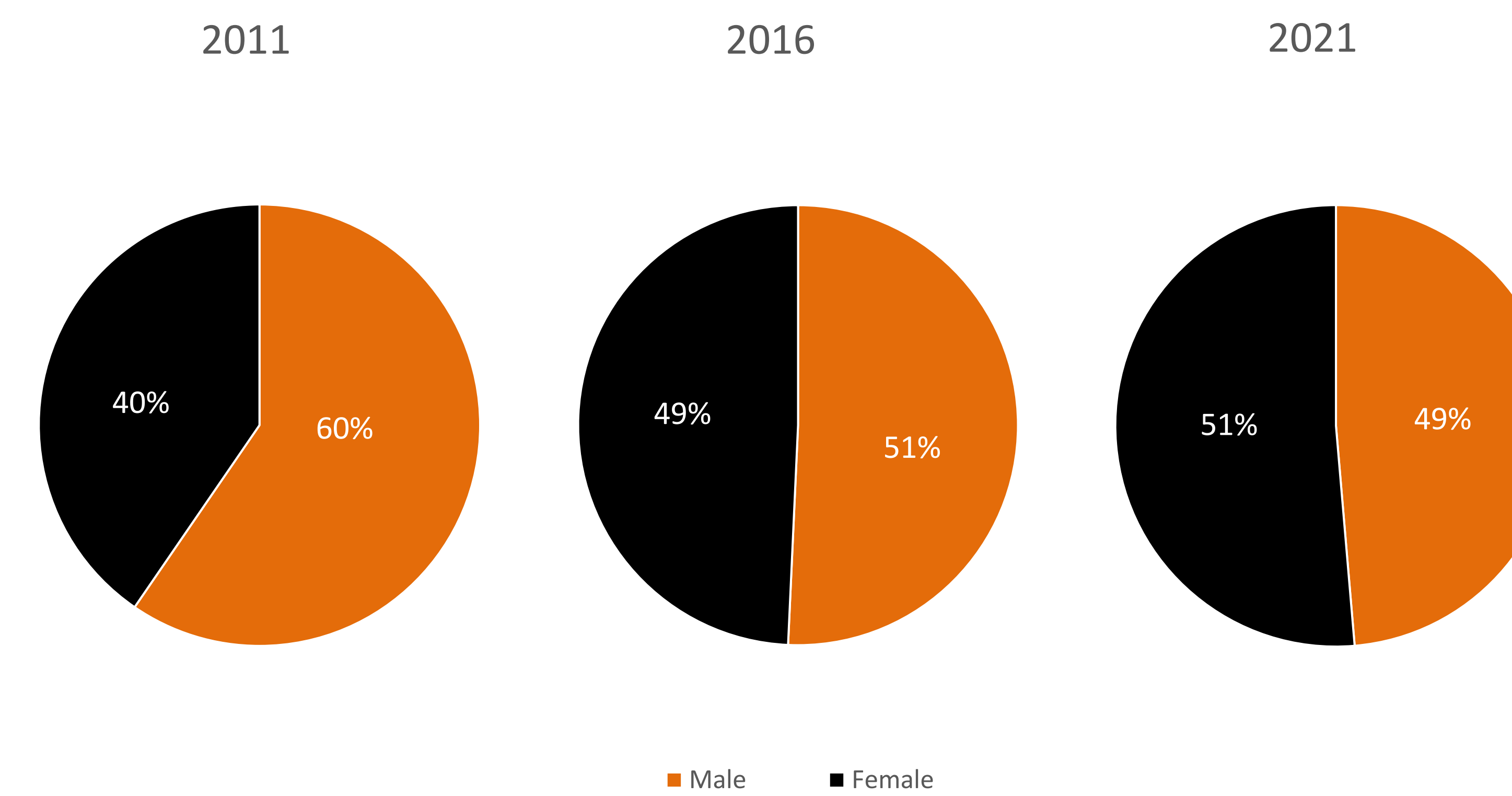
Our team retrieved the roster for the NIH Communication Disorder Review Committee (CDRC) study panel for the years 2011, 2016, and 2021. We collected study section member names, professional affiliation, academic degrees, and state residency. Study authors used a pilot-tested google form for data extraction. Gender was determined using genderized.io, a simple application programming interface, (requiring a probability of > .6) or by google search of the study section member. Once collected, the individuals were sorted by their gender and geographical region.

## RESULTS

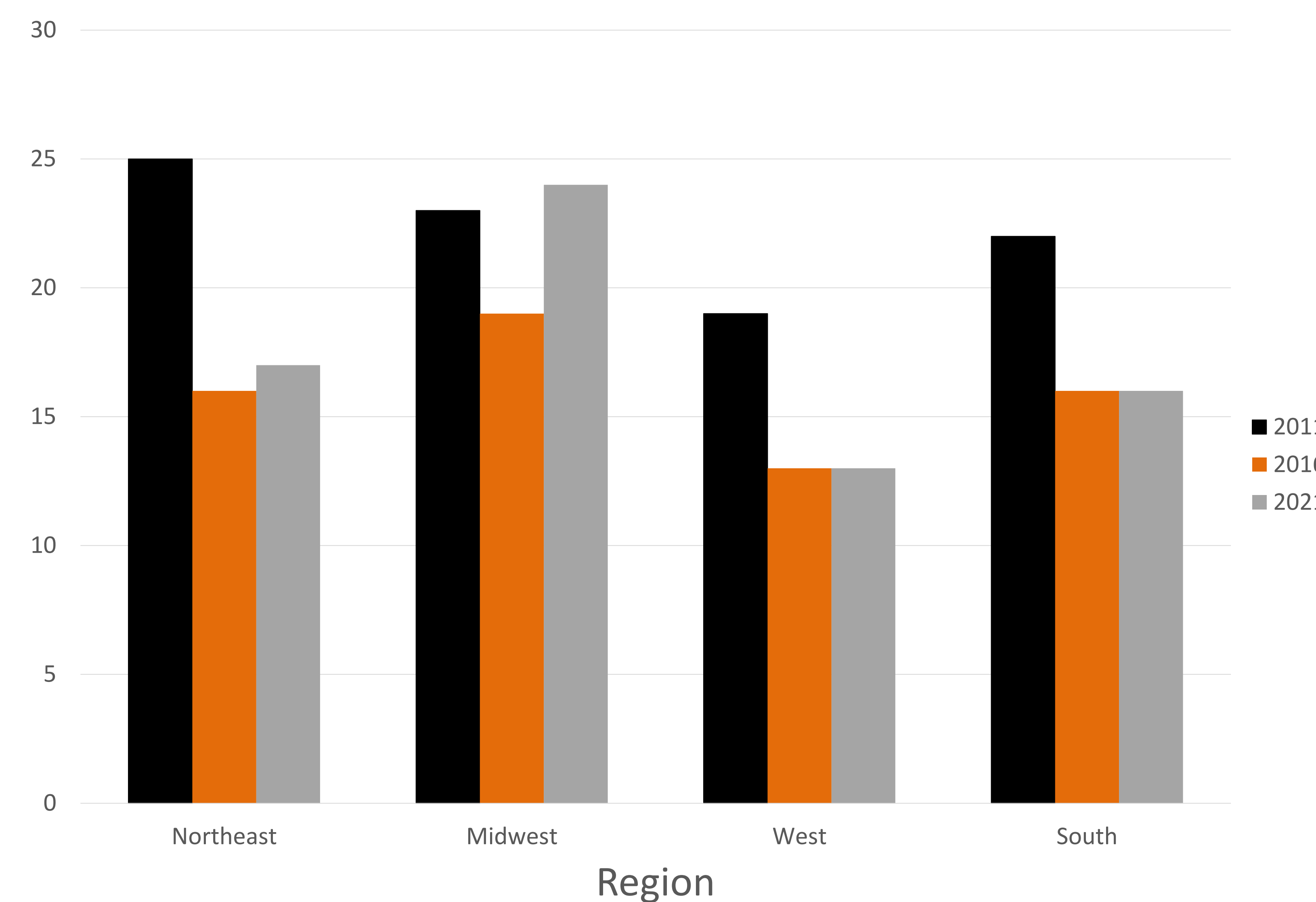
### Headline to label the table below

Over time, women were represented in study sections at an increasing rate. In 2011, there were 56 (60%) males and 38 (40%) females. In 2016, there were 35 (51%) males and 34 (49%) females. In 2021, there were 36 (49%) males and 38 (51%) females. We observed a detectable upward trend of female participation over time.

### Gender Representation



### Geographical Representation Amongst U.S. Regions



Regarding geography, the region of the country least represented in 2011 was the West (n=15, 23%), while the Northeast was the most represented (n=25, 28%). In 2016, a majority of study section members were from the Midwest (n=19, 29%) followed by the South and Northeast (n=16, 24%). In 2021, the majority of members were also from the Midwest (n=24, 34%), with the smallest contribution being from the West (n=13, 19%). The most underrepresented region of the country in the years we examined was the West (average = 21%).

## CONCLUSION

Data shows that historically there has been a discrepancy in the ratio of male to female involvement in the scientific community. Having diversity among the science community is beneficial for reducing bias. Our results show from 2011 to 2021, there has been an increase in the percentage of females on the CDRC, from 40% in 2011 to 51% in 2021. This data suggests an upward trend in female involvement. Further, our data displays a possible geographical disparity in the scientific community.

## REFERENCES

Nicole A. Silva, Samantha Y. Cerasiello, John S. Herendeen, Alaba Sotayo, Irene Say, Catherine A. Mazzola, James K. Liu, Jean Anderson Eloy (2020). "Gender differences in NIH grant funding in neurological surgery". *Journal of Clinical Neuroscience*, Volume 80, Pages 43-49.

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