Vassar Research Team

Sex and Geographic Disparities among NIH NSD-A Study Section Members

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INTRODUCTION

Sex and geographic bias among the scientific community disproportionately impact the dispersion of tax payer funding for research. Diversity, equity and inclusion representation is crucial for the evolving U.S. population. Progressing discovery requires development from the next generation of researchers. Regarding funding distributed by the National Institute of Health (NIH), the role of diverse representation is even more crucial for the distribution of national grants, thus requiring analysis for the composition of their committee members.

OBJECTIVES

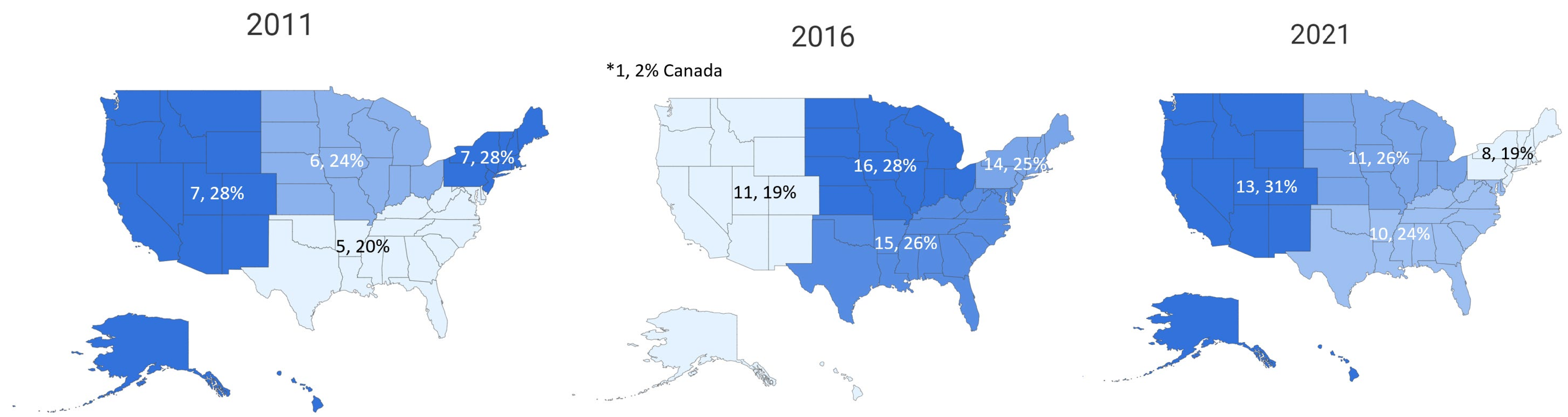
We studied 3 years (2011, 2016, 2021) of rosters at the Neurological Sciences and Disorders Study A (NSD-A) of the National Institute of Health to evaluate the sex and geographic representation.

METHODS

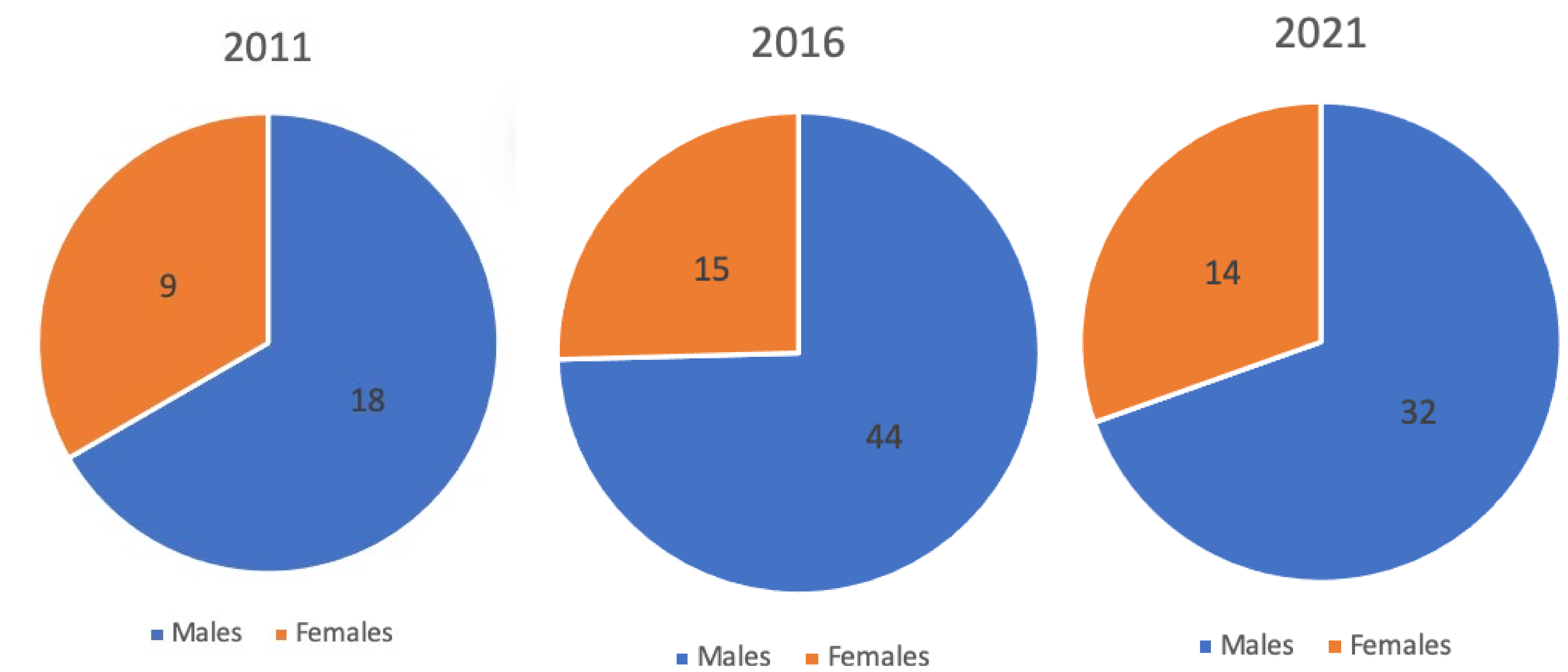
Our team retrieved rosters for the NSD-A NIH study panel for all meetings held in 2011, 2016, and 2021. The study section names, membership type, institution, state, sex, and academic rank were extracted. Study authors used a pilot tested google form for data collection. Sex was determined through web searches and genderize.io (0.6 value required to assign sex). Data was analyzed to detect percentages of male and female study section members and their respective region (using regions defined by the US Census Bureau) of the NSDA study section in 2011, 2016, and 2021.

RESULTS

Geographic Distributions Among NSD-A Section Members in 2011, 2016, and 2021



Sex Differences Among NSD-A Section Members in 2011, 2016, and 2021



Analysis

In the years studied, males outnumbered females 2 to 1 or greater, with no detectable trend. The 2011 NSDA study section was comprised of 18 males (67%) and 9 females (33%). 2016 NSDA study section was comprised of 44 males (75%) and 15 females (25%). Lastly, the 2021 NSDA study section was comprised of 32 males (70%) and 14 females (30%). Geographically, regional distributions are represented variably. In 2011, we saw the West and Northeast represented most (each n=7, 28%), followed by the West (n=6, 24%), and the South (n=5, 20%). 2016 showed differences with the Midwest most represented (n=16, 28%), followed by the south (n=15, 26%), the northeast (n=14, 25%), the West region (n=11, 19%), and 1 committee member from Canada (n=1, 2%). Lastly, in 2021, the distribution shifts again, with the highest representation from the West region (n=13, 31%), then the Midwest (n=11, 26%), the South (n=10, 24%), and the Northeast (n=8, 19%).

CONCLUSION

Representation geographically showed no noticeable trends, rather fluctuations between regions each year studied. While there is noticeable variety in the 3 years studied geographically, the most significant bias lies on the disproportion between males and females represented in the NSDA study section. Addressing the sex bias to represent a closer reflection of the country's population is essential for a more equitable funding for research studies. While several studies have been addressed the sex bias that exists within many of the NIH study sections, more research is required to analyze the composition of the committees based on racial and minority groups. Many factors influencing health problems requires the attention of research for understanding how improve the quality of life for those effected. Due to variability in disease states, a committee must reflect the populations that are represented.

REFERENCES OR ACKNOWLEDGEMENTS

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