

# Gender Disparities in NIH Funding, Publication Output, and H-Index Among Endowed Chairs in Dermatology

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## Introduction

- Endowed professorships associate with differences in male/female representation.<sup>1</sup> Women comprise 19.4% of department chairs across specialties.<sup>2</sup>
- Representation differences between men and women is not described for dermatology endowed chairs.<sup>3-5</sup> Thus, we aimed to characterize the differences.
- We hypothesized there would be differences in research metrics and NIH funding.

## Methods

- Dermatology departments (110) were identified.
- Reviewers (3) identified publicly available chair profiles (Jan 2024), demographics, endowment status, self-identified research interests, H-index, and NIH funding.
- A cross-sectional comparison was performed between men and women who were dermatology chairs and had an endowment.

## Discussion

- The dermatology female faculty increase of +50% is not reflected in endowed chair positions.<sup>2</sup>
- It is unclear why differences in NIH funding and average publications exist between men/women despite equal average year since med school graduation and similar research interests.
- Initiatives are needed to better understand how gender disparities affect endowed dermatology chair positions.
- These initiatives can help inform strategies to alleviate gender disparities within these endowed positions.<sup>1</sup>

## Limitations

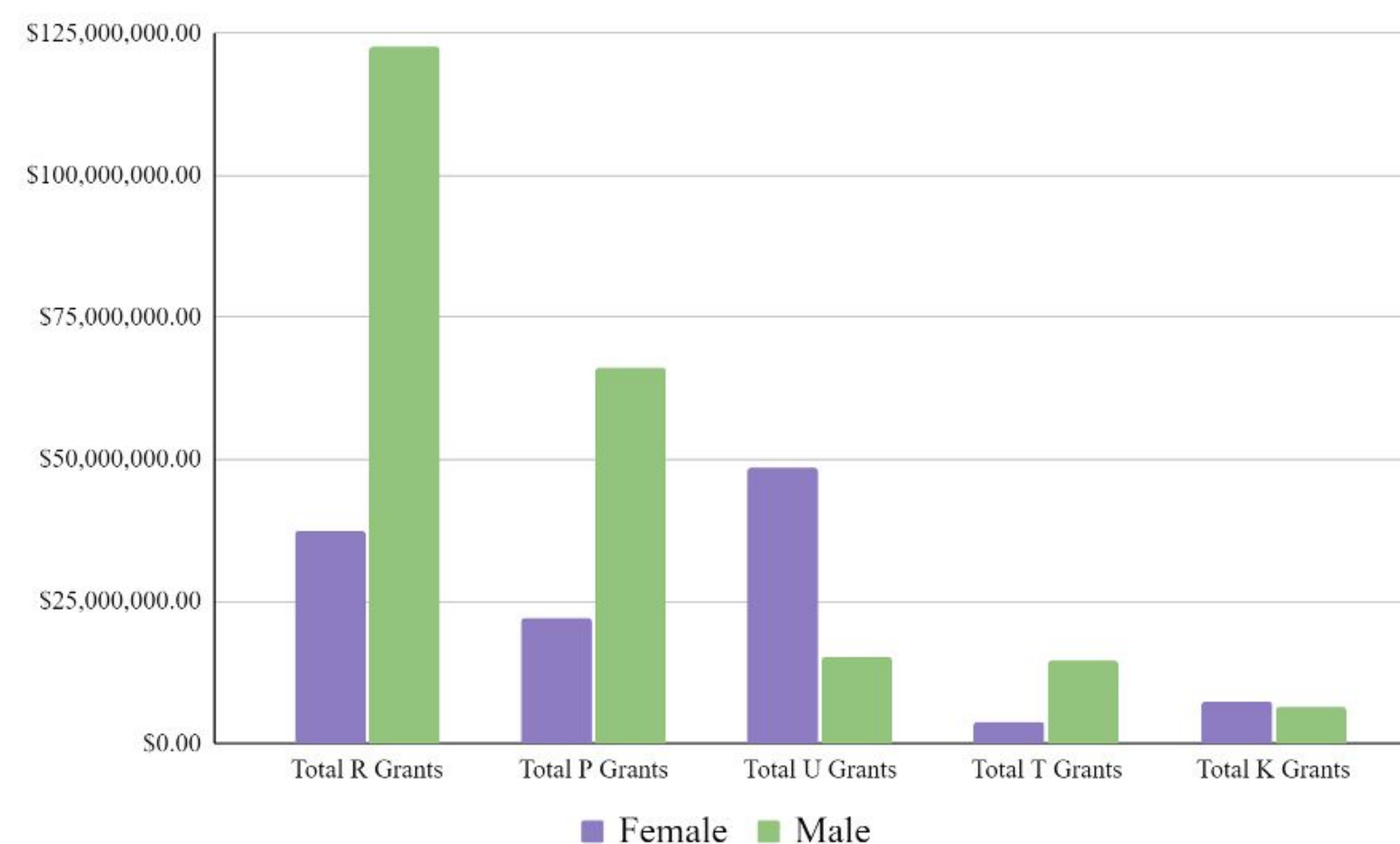
- We did not have self-reported gender, thus it was considered as binary.
- Moment-in-time analysis
- Publicly available information
- Small sample size (n=43)

## Results

**Table 1.** Average medical school graduation year, publication count, H-index value, and NIH funding amount for male (n=25) and female (n=18) dermatology chairs with endowments. Outliers were removed from each category using the interquartile method. Two-tailed t-tests for two samples with unequal variances were performed, and p-values < 0.05 were considered statistically significant.

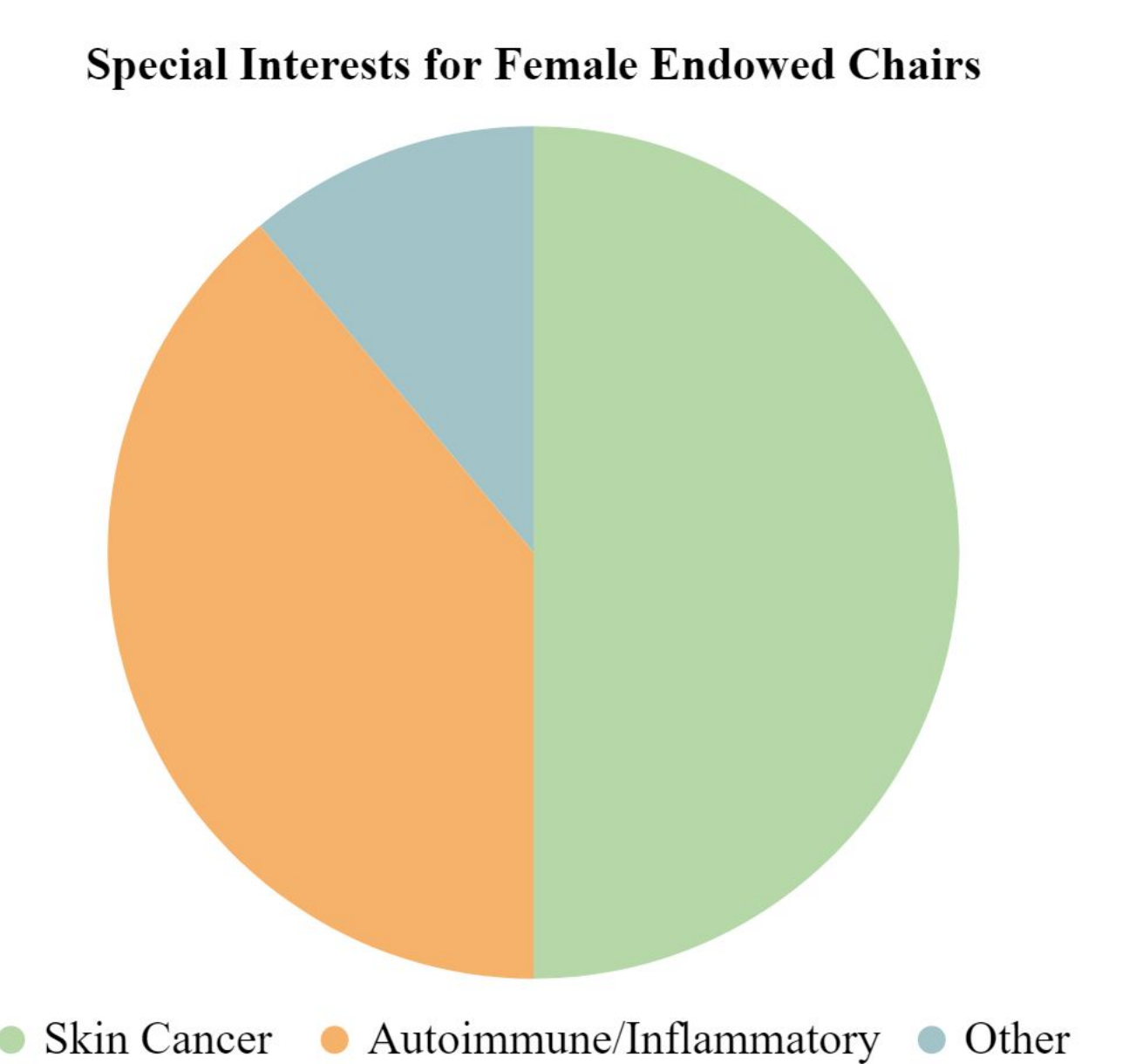
	Male (n=25, 58%)	Female (n=18, 42%)	p-value (two-tailed, two samples with unequal variances)
Average medical school graduation year	1990.3	1990.4	0.9630
Average publication count	245	160	0.0348
H-index value	50.8	39.8	0.1759
NIH funding amount (from RePORT)	\$17,317,951	\$5,755,507	0.0328

**a**

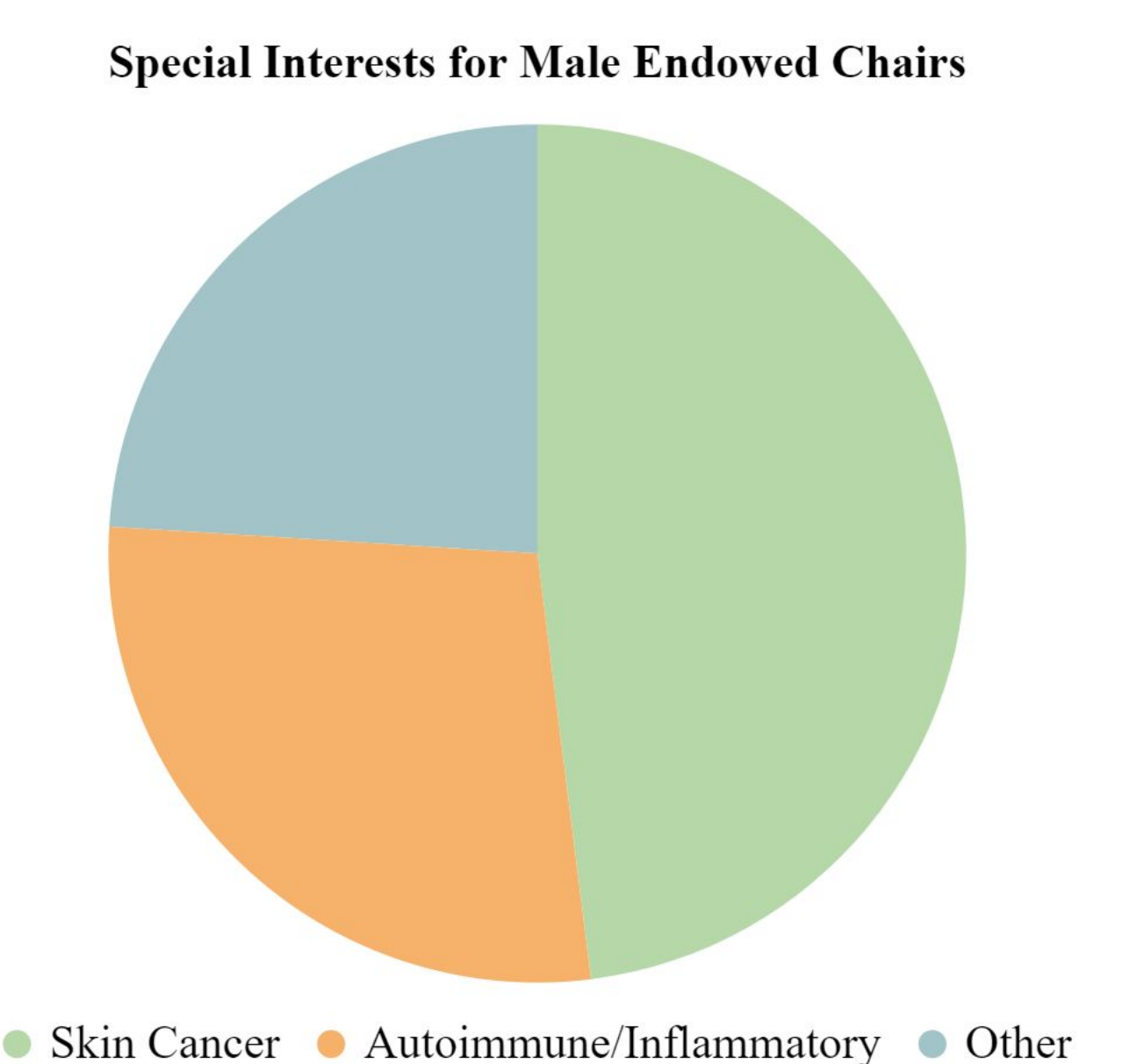


**Figure 1.** Cumulative sum of all R, P, U, T, and K grants awarded to female and male dermatology endowed chairs through NIH funding.

**b**



**c**



## Future Directions

- Identify ways to benchmark the positive impact female dermatology chairs have on departments.
- Identify barriers to endowment by female chairs
- Include an analysis of the characteristics of assistant, associate, and full dermatology professors dermatology holding an endowed position.

## References

1. Thorndyke LE, Milner RJ, Jaffe LA. Endowed Chairs and Professorships: A New Frontier in Gender Equity. *Academic Medicine*. 2022;97(11):1643-1649. doi:10.1097/ACM.00000000000004722
2. Xierali IM, Nivet MA, Pandya AG. US Dermatology Department Faculty Diversity Trends by Sex and Underrepresented- in-Medicine Status, 1970 to 2018. *JAMA Dermatol*. 2020;156(3):280-287. doi:10.1001/jamadermatol.2019.4297
3. Roubinov D, Gold JA, Jia LS, et al. Gender differences in endowed chairs in Departments of Psychiatry and Behavioral Sciences from the top-10 NIH-funded medical schools in the US. *Psychiatry Res*. 2022;317:114805. doi:10.1016/j.psychres.2022.114805
4. Jia L, Rooney MK, Jacobson CE, et al. Factors Associated With Endowed Chair Allocation in Medical Oncology in the United States. *JNCI Cancer Spectr*. 2022;6(3):pkac036. doi:10.1093/jncics/pkac036
5. Gold JA, Roubinov D, Jia LS, et al. Gender Differences in Endowed Chairs in Medicine at Top Schools. *JAMA Intern Med*. 2020;180(10):1391-1394. doi:10.1001/jamainternmed.2020.2677