



# Descriptive Analysis of Integrated Plastic Surgery Program Directors

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## Introduction

Gender disparities in surgery have been heavily reported on, however there is limited information available about gender differences in academic plastic surgery, specifically amongst program directors (PD).<sup>1,2</sup>

## Methods

A cross sectional study of publicly accessible online resources of 82 ACGME accredited integrated plastic surgery residency programs for the 2020-2021 residency cycle was performed. These sources included each institution's website, the American Medical Association's Fellowship and Residency Electronic Interactive Database (FREIDA), Doximity and Healthgrades.com. Scholarly output was determined based on number of publications and H-index listed on Scopus. Demographic and academic data of integrated plastic surgery PDs were analyzed, focusing on the comparisons between PD gender. Statistical analysis was carried out with a student's t-test for quantitative variables. A chi-square analysis or fisher's exact was used to compare categorical variables with significance set with a P value <0.05.

## Results

- 72 PDs (87.8%) graduated from a U.S. medical school, while 10 (12.2%) were international medical graduates. All current PDs have a M.D. degree.
- 56 (68.3%) of PDs completed general surgery residency followed by a plastics fellowship.
- 15 PDs (18.3%) were female, and 67 PDs (81.7%) were male.
- All 15 (100%) of female PDs completed a fellowship compared to only 43 (64.2%) of male PDs.
- Female PDs are younger, on average, than male PDs (p=0.02) and have served shorter terms than male PDs (p=0.003).
- Male PDs had a higher number of publications and H-indices compared to female PDs (p<0.05).
- There was no difference in academic ranking between male and female PDs.
- There were similar percentages of female residents enrolled in plastic surgery programs regardless of the gender of the PD (p=0.75).

Characteristic	Overall (n=82)	Female (n=15)	Male (n=67)	P value
Current Age (years)	51.1 ± 9.7	46.5 ± 7.9	52.2 ± 9.8	0.02
Age at appointment as PD (years)	46.4 ± 8.6	43.7 ± 7.6	47.0 ± 8.8	0.15
Term length (years)	4.6 ± 3.6	2.9 ± 1.9	4.9 ± 3.8	0.003
Time between plastics training and PD appointment (years)	11.6 ± 7.4	10.5 ± 7.6	11.8 ± 7.4	0.57
<b>Academic Title</b>				
Professor	20	2	18	
Associate Professor	33	8	25	
Assistant Professor	24	5	19	
No ranking	5	0	5	
<b>Plastic Surgery Residents by gender</b>				
Percentage of Male Residents	60.9	61.7	60.7	0.82
Percentage of Female Residents	36.4	37.5	36.1	0.75
<b>Scholarly Output</b>				
Publications	45.3 ± 45.7	27.5 ± 21.3	49.9 ± 48.9	0.008
H-Index	12.4 ± 8.5	8.7 ± 6.5	13.3 ± 8.7	0.03

**Table 1:** Male and Female Program Director Demographics and Characteristics

## Discussion

- Most integrated plastic surgery PDs are male with an M.D. who completed a general surgery residency and a plastic surgery fellowship.
- Male PDs had higher research output, which may be attributed to their older average age, allowing for more research time.
- Although females make up only 18.3% of PDs, this percentage is comparable to the 17.2% of active female plastic surgeons in the U.S. as reported by the American Medical Association.<sup>3</sup>
- As more women train in plastic surgery, it is possible that the percentage of females serving academic roles, will increase. The American Board of Plastic Surgery continues to advocate for women with policies such as the 12-weeks of available family/maternity leave and mentorship programs.<sup>4</sup>
- Better understanding of the characteristics of plastic surgery PDs, junior faculty, and recent graduates can aid female plastic surgeons in attaining academic positions.

### References

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