

Shifting Paradigms in Dermatology: Understanding Gender Wage Disparities in Dermatology Through Claudia Goldin's Research

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Shifting Paradigms in Dermatology: Understanding Gender Wage Disparities in Dermatology Through Claudia Goldin's Research

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Abstract

Wage differences between men and women are described. Dr. Claudia Goldin's 2023 Nobel prize improved our understanding regarding these observations. Here, we sought to evaluate wage differences within dermatology through the lens of Goldin's research. We hypothesized the presence of wage differences between men and women despite academic rank or leadership positions. AAMC survey data from 2022 demonstrated, women dermatologists comprised 36.95% (75/203) of full professors, 61.54% (152/247) of associate professors, and 63.47% (311/490) of assistant professors; among these 52.17% (12/23) were service chiefs and 35.48 % (22/62) were department chairs. The weighted mean salary was lower for women at all academic ranks and leadership roles; Division chiefs had the most significant (45.52%) wage difference between men and women. This is a \$281,674 difference between men and women chiefs per year. Women earned \$91,738.73 less on average/year when considering all academic positions. Limitations of this study include the sample size and the moment in time analysis. Questions evaluating direct causes for the observed differences were not seen in the AAMC survey. Future research should focus on capturing why this pattern occurs and how to improve it.

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Title: Shifting Paradigms in Dermatology: Understanding Gender Wage Disparities in Dermatology Through Claudia Goldin's Research

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“Female physicians do the impossible” [1]. Claudia Goldin awarded the 2023 Nobel Prize in Economic Sciences for gender gap research, captures what many female dermatologists feel. Goldin provides insights into women’s pay gap and leadership underrepresentation, which occurs despite more women entering dermatology (62%) [2]. While female representation has improved, we hypothesized disparities in pay and leadership persist [3,4]. We aimed to quantify leadership and wage differences between men and women in dermatology through the lens of Goldin’s research. This cross-sectional analysis noted substantial wage differences between men and women in dermatology positions.

Percentages of women in dermatology by academic rank, leadership roles, and salary were contrasted with men’s using data from the AAMC Faculty Salary Report 2022. Chi-square analysis tested statistical significance ($P<0.05$). Women comprise 36.95% (75/203) of full professors, 61.54% (152/247) of associate professors, 63.47% (311/490) of assistant professors, 52.17% (12/23) of chiefs, and 35.48 % (22/62) of department chairs (Figure 1). Division chiefs had a \$281,674.29 (45.52%) difference in mean income between female (−26.79%) and male dermatologists (+18.73%) (Figure 2). Excluding Mohs training increased this gap to \$320,420.80

Figure 1. Percentage of Women and Men in Dermatology Academic Leadership Roles in the AAMC Faculty Salary Report 2022 (57.73%). Department chair salaries had a \$1,505.33 difference (Figure 2).

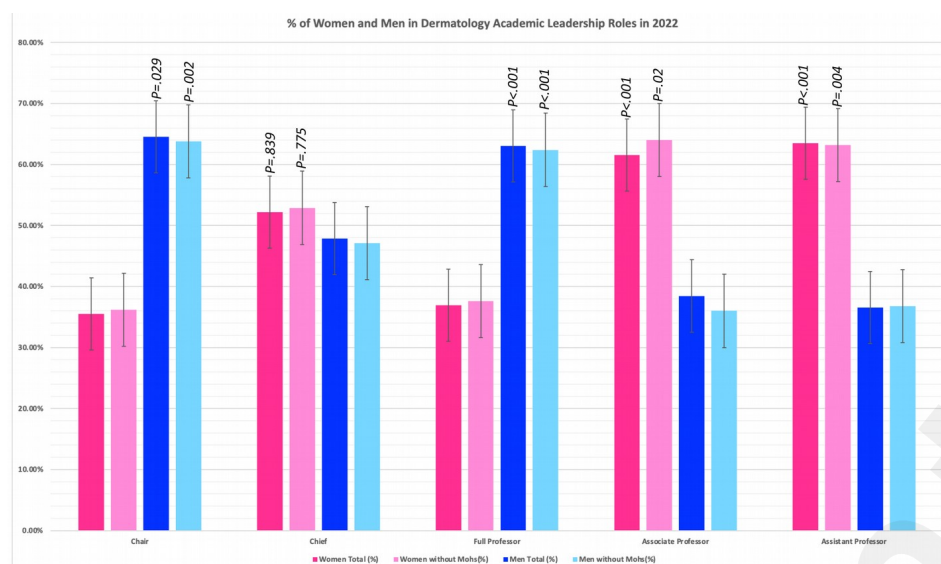


Figure 1 Legend Dermatology academic leadership roles of respondents to The Association of American Medical Colleges (AAMC) Faculty Salary Report 2022. $P<.001$ are indicated by asterisks, all other P-values are listed. There were significantly more men than women in chair and full professor positions, and significantly more women than men in associate and assistant professor positions in 2022. There was no significant difference between the number of women and men in chief roles in 2022.

Figure 2. Percent Change from Weight Mean Salary for Women and Men in Dermatology Academic Leadership Roles in 2022

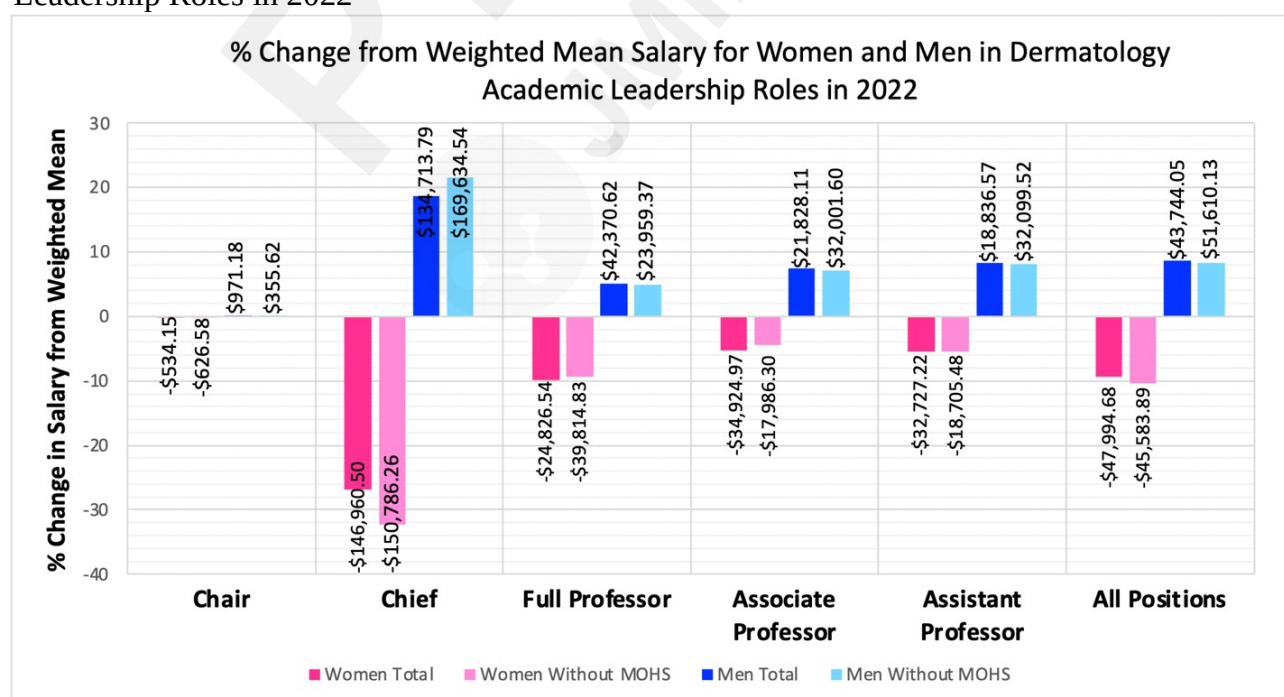


Figure 2 Legend

Salary data from the AAMC Faculty Salary Report 2022. A weighted mean salary was calculated for each position, compared between men and women, and the percentage change from the mean is displayed. Women reported salaries below the weighted mean, while men reported salaries above it in all dermatology academic leadership roles in 2022. For chair positions, the percent change for women (-0.15%) and men (0.08%) and is too small to be visualized.

To better understand these trends, Goldin highlights different types of job/role trajectories: linear, with long continuous hours, and nonlinear, with more flexibility [1,5]. Goldin contends that dermatology is generally nonlinear, partly explaining its female-dominated representation. Despite higher earnings enabling care services, female physicians still disproportionately take time off for family-related absences [1], leading to missed leadership opportunities, potentially explaining why female representation drops higher up dermatology's leadership ladder. Given the time required for late-career promotions, we anticipate more women chairs and full professors in the coming decade. Despite differing representations among roles, women still earn less than men in all academic dermatology positions, which is consistent with the wage gap Goldin describes. This trend may reflect women's diverse roles but underscores a broader pattern of pay inequality within dermatology leadership.

Limitations of this analysis include its moment-in-time nature. Changes in salary trends could offer additional information on progress toward equity. Additionally, the AAMC did not include data on respondents' age/years of experience within leadership roles.

Encouraging wage equity should occur at national, institutional, and personal levels. Nationally, the AAMC could enhance its faculty salary survey with questions exploring what information was available at contract negotiation and how family caretaking responsibilities impact career advancement. Institutionally, focus groups could evaluate how parental leave policies, flexible work (i.e., teledermatology), mentorship programs, and leadership training impact promotion. Focus groups could then be best informed on mitigating systemic bias against women, although Goldin

highlights that discrimination is not the primary driving force of the gender wage gap [1].

Our study reveals stark gender pay differences among academic dermatologists. We urge the AAMC to explore these differences through more nuanced survey questions in the faculty salary report. By integrating Goldin's insights, we aim to promote an equitable environment in dermatology, recognizing the complex interplay between gender, compensation, and career progression.

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