

Trends of Academic Faculty Identifying as Hispanic at US Medical Schools, 1990-2021

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ABSTRACT

Background According to recent census data, Hispanic and Latino populations comprise the largest minority group in the United States. Despite ongoing efforts for improved diversity, equity, and inclusion, Hispanics remain underrepresented in medicine (UIM). In addition to well-established benefits to patient care and health systems, physician diversity and increased representation in academic faculty positively impact the recruitment of trainees from UIM backgrounds. Disproportionate representation (as compared to increases of certain underrepresented groups in the US population) has direct implications for recruitment of UIM trainees to residency programs.

Objective To examine the number of full-time US medical school faculty physicians who self-identify as Hispanic in light of the increasing Hispanic population in the United States.

Methods We analyzed data from the Association of American Medical Colleges from 1990 to 2021, looking at those academic faculty who were classified as Hispanic, Latino, of Spanish Origin, or of Multiple Race—Hispanic. We used descriptive statistics and visualizations to illustrate the level of representation of Hispanic faculty by sex, rank, and clinical specialty over time.

Results Overall, the proportion of faculty studied who identified as Hispanic increased from 3.1% (1990) to 6.01% (2021). Moreover, while the proportion of female Hispanic academic faculty increased, there remains a lag between females versus males.

Conclusions Our analysis shows that the number of full-time US medical school faculty who self-identify as Hispanic has not increased, though the population of Hispanics in the United States has increased.

Introduction

Physician diversity in faculty positions and academic leadership roles is critical to the recruitment of trainees underrepresented in medicine (UIM) and the inclusivity of residency programs.^{1,2} Despite efforts, increasing the representation of traditionally underrepresented groups in medicine continues to be problematic.³ Physician workforce studies demonstrate that Hispanic faculty remain underrepresented as compared to the US population.⁴ While studies on medical school basic science faculty show increases in female faculty and slight increases in faculty identifying as Hispanic, such increases do not match US population increases.⁵ Analysis of trends in the representation of Hispanic faculty can better inform future recruitment and retention. Using existing demographic data on clinical faculty at US medical schools, we examined the proportional representation of faculty identifying as Hispanic over the last 3 decades.

Methods

The Association of American Medical Colleges (AAMC) faculty roster reports numbers of full-time US medical school faculty physicians annually by sex, race, ethnicity, rank, and department. We obtained the data from 1990 to 2021 through direct request to the AAMC. We analyzed the data focusing on faculty from the 16 clinical specialties in the AAMC roster who identified as Hispanic, Latino, of Spanish Origin, or of Multiple Races—Hispanic. Previous analyses did not include public health and preventive medicine, and as such we did not include these in our overall analysis.^{4,5} We used descriptive statistics and visualizations to illustrate the level of representation of Hispanic faculty by sex, rank, and clinical specialty over time. Annual proportions were estimated with the total number of medical school faculty members in the 16 clinical specialties as the denominator. All analyses were performed using R version 4.0.3.

This study was determined exempt by the Stanford University Institutional Review Board, with a waiver of informed consent.

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Results

The proportion of faculty who identified as Hispanic increased from 3.1% in 1990 to 6.01% in 2021 (TABLE). Although there were more male Hispanic faculty in 2021, we observed a steeper increase in female faculty (0.76% in 1990 to 2.74% in 2021; FIGURE). Among academic ranks, the proportion of Hispanic faculty was largest in assistant professors, followed by associate professors, instructors, and full professors (TABLE). At the assistant professor level, Hispanic representation rose from 1.29% in 1990 to 3.41% in 2021. Upward trends were present but slower among other academic ranks (TABLE). By specialty, the rate of increase was largest in internal medicine (0.86%) and smallest in pathology (0.01%); within internal medicine, the largest growth was among assistant professors (0.64%; TABLE).

Discussion

The lived experience and career aspirations of UIM medical trainees carry unique challenges that stand to benefit from and require the insight of UIM faculty and residency leadership.^{1,2,6} Our work highlights the advancing, but limited, representation of Hispanic faculty in US medical schools. Recommended efforts to enhance representation include incorporating diversity in an institution's mission statement, including a baseline number of minority candidates in the applicant pool, and overall monitoring of institutional diversity efforts over time to ensure progress.⁷ Our analysis suggests that there is still more work to be done. While all specialties demonstrated positive change over the period studied, there continues to be a significant gap in Hispanic faculty representation compared to US demographics. Individuals who identify as Hispanic make up 18.9% of the US population as of 2022 (increased from 9.0% in 1990).⁸ Although numbers of female Hispanic faculty increased less steeply (24.7% increase from 1990 to 2021) than male Hispanic faculty (39% increase from 1990 to 2021), notably inconsistent with the general overall increase of females in medicine,⁹ the total number of female Hispanic faculty lag behind male Hispanic faculty.

Our analysis supports the ongoing call to action by many organizations, including the National Academy of Medicine, for dedicated institutional programming and policy changes to increase Hispanic representation.⁹ Improving the representation of UIM faculty begins with increasing the number of UIM trainees entering the workforce pool. Outreach efforts through pathway and pipeline programs to encourage premedical students to consider a career in health care

should continue, but attention should be paid at each successive stage, from medical school to fellowship to academic appointment. A sustainable and effective response to achieve representation of Hispanic faculty requires integrative approaches at the individual and institutional levels, including an understanding of systemic barriers that prevent underrepresented minority populations from entering the medical field.¹⁰ As our analysis suggests, focused attention on retention and mentoring efforts are especially important when considering the relatively slower increase at the instructor, professor, and associate professor levels.

More concrete actions at the faculty level include targeted support for Hispanic faculty members toward academic promotion.¹¹ Recruitment and retention of UIM faculty should be a core component of institutional visions supported through the promotion of an inclusive and safe work environment, mindfulness in avoiding the minority or cultural tax, adequate and fair financial compensation, and the offering of professional development opportunities tailored to the interests of UIM academicians.¹²

A diverse faculty is important to the recruitment and development of UIM students and residents. In addition to professional and social factors, such as strength of program and geographic location, UIM students consider factors of diversity, including faculty representation, when deciding on a residency training program.¹³ Reviews and recommendations for improved UIM recruitment consistently refer to the importance of UIM faculty presence at all stages of the recruitment and selection process, highlighting the impact of UIM faculty simply being visible during interview days.^{12,14} Furthermore, UIM residents identify the lack of diverse representation in faculty, specifically program leadership, as a noted stressor during their training in the form of social isolation from colleagues with shared experience.³ Increasing the number of Hispanic faculty is critical, not only for improved patient and systems outcomes, but also for the continued recruitment, retention, and development of future UIM physicians.

Study limitations include an inability to account for the changing demographics in both the US public and physician populations. As data are culled from reports of US academic medical institutions and then supplemented by AAMC data resources, it is impossible to determine the exact definition of Hispanic or have analysis on further subgroupings within the category. Future research is needed to clarify the rate of promotion and attrition among Hispanic faculty members.

TABLE
Change in Proportion of Hispanic Faculty Physicians at US Medical Schools From 1990 to 2021

Specialty	Overall			Professor			Associate Professor			Assistant Professor			Instructor		
	1990 (%)	2021 (%)	Absolute Change (%)	1990 (%)	2021 (%)	Absolute change (%)	1990 (%)	2021 (%)	Absolute change (%)	1990 (%)	2021 (%)	Absolute change (%)	1990 (%)	2021 (%)	Absolute change (%)
Overall	3.1	6.01	2.91	0.6	0.83	0.22	0.75	1.1	0.35	1.29	3.41	2.12	0.4	0.57	0.17
Anesthesiology	0.17	0.32	0.16	0.01	0.02	0.01	0.03	0.06	0.04	0.1	0.2	0.1	0.03	0.03	0
Dermatology	0.03	0.04	0.01	0.01	0.01	0	0.01	0.01	-0.01	0.01	0.02	0.01	0	0	0
Emergency medicine	0.01	0.22	0.22	0	0.02	0.02	0	0.03	0.03	0	0.14	0.14	0	0.04	0.03
Family medicine	0.15	0.28	0.13	0.01	0.02	0.02	0.03	0.04	0.01	0.08	0.19	0.11	0.02	0.03	0
Internal medicine	0.81	1.67	0.86	0.19	0.23	0.05	0.18	0.31	0.13	0.31	0.95	0.64	0.12	0.15	0.03
Neurology	0.09	0.24	0.15	0.01	0.04	0.03	0.03	0.05	0.02	0.04	0.12	0.08	0.01	0.02	0.01
Obstetrics & gynecology	0.2	0.31	0.11	0.03	0.04	0.01	0.05	0.05	0	0.09	0.17	0.08	0.03	0.04	0.01
Ophthalmology	0.05	0.09	0.04	0.02	0.01	0	0.02	0.03	0.01	0.02	0.04	0.02	0	0.01	0
Orthopedic surgery	0.03	0.09	0.06	0.01	0.01	0	0.01	0.02	0.02	0.01	0.05	0.03	0	0.01	0.01
Otolaryngology	0.02	0.07	0.06	0	0.02	0.01	0	0.02	0.01	0.01	0.04	0.03	0.01	0	0
Pathology-clinical	0.14	0.16	0.02	0.05	0.04	-0.01	0.05	0.03	-0.01	0.04	0.07	0.03	0.01	0.01	0
Pediatrics	0.48	1.07	0.59	0.09	0.14	0.05	0.12	0.21	0.09	0.2	0.6	0.4	0.07	0.1	0.03
Physical medicine	0.03	0.07	0.03	0	0.01	0.01	0.01	0.02	0.01	0.02	0.04	0.02	0.01	0	0
Psychiatry	0.34	0.46	0.11	0.05	0.04	0	0.09	0.05	-0.04	0.16	0.29	0.13	0.04	0.07	0.02
Radiology	0.24	0.29	0.05	0.06	0.04	-0.02	0.05	0.06	0.01	0.1	0.16	0.06	0.02	0.02	-0.01
Surgery	0.3	0.63	0.33	0.08	0.12	0.04	0.08	0.11	0.03	0.12	0.34	0.22	0.02	0.05	0.03

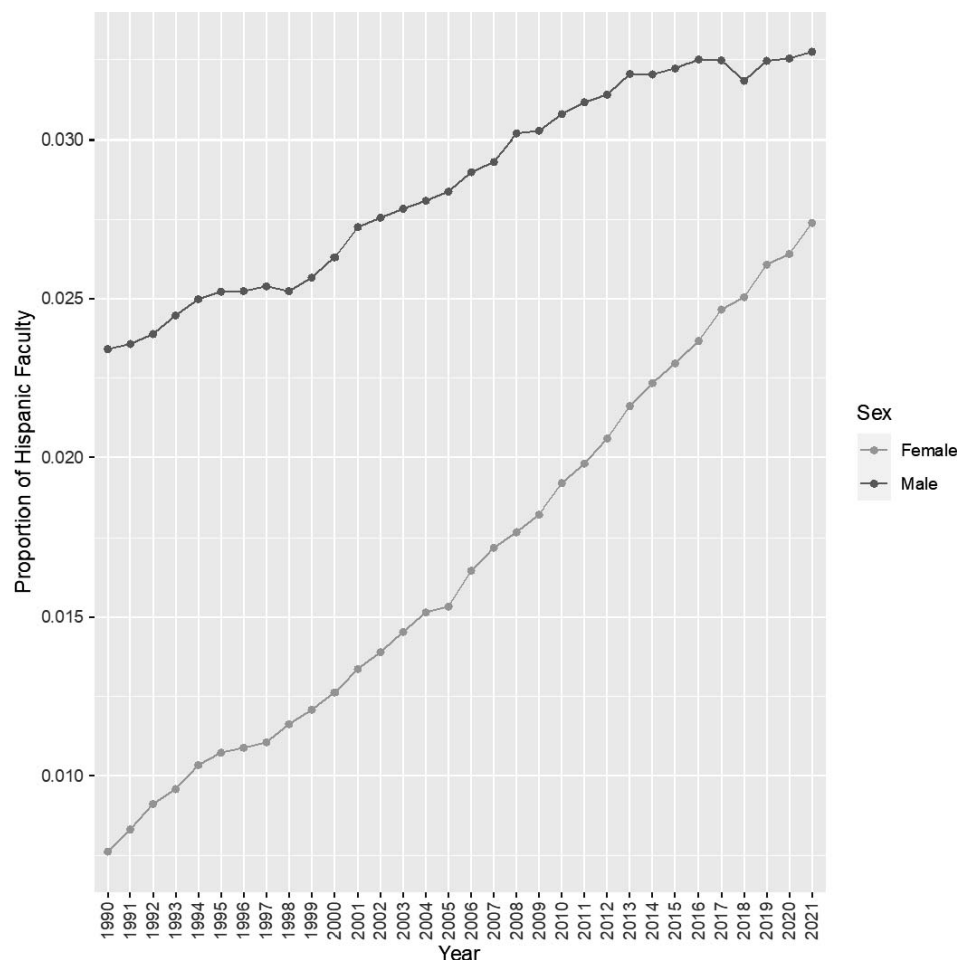


FIGURE
Proportion of Hispanic Faculty by Sex From 1990 to 2021

Conclusions

As medical training programs continue to address diversity, equity, and inclusion, the number of Hispanic faculty remains disproportionate to the US population who identify as Hispanic.

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