

# Survey of Demographic and Educational Factors Among Dermatology Chairs and Chiefs

Ali Alikhan, MD; Michael Ghods, BS; April W. Armstrong, MD

*We surveyed 107 chairs and chiefs of US dermatology programs regarding demographic and educational factors. Of the 69 (64%) participants who returned completed surveys, 59 (86%) were men and 10 (14%) were women. We compared our data from chairs and chiefs to the US dermatology workforce and found that the chairs and chiefs were significantly more likely to be older men who were board certified in other fields, trained in dermatopathology, and specialized in Mohs micrographic surgery ( $P < .001$ ). Many chairs and chiefs also actively participated in research and held advanced degrees in addition to doctor of medicine.*

*Cutis.* 2012;89:195-198.

To characterize demographic and educational factors associated with leaders in academic dermatology, we compiled data from chairs and chiefs of US dermatology departments and divisions and compared our findings with the US general dermatology workforce. Our study extends the findings by Turner et al<sup>1</sup> with greater emphasis on demographic, educational, and academic factors among academic leaders in dermatology.

## Methods

Our study was approved by the University of California Davis School of Medicine, Sacramento, institutional review board. We distributed surveys (14 multiple-choice questions) to chairs and chiefs

of all US dermatology departments and divisions, excluding military programs. Names of chairs and chiefs were obtained from department/division Web sites. Questions focused on demographic, educational, and academic information. We also collaborated with the Workforce Task Force of the American Academy of Dermatology to obtain current dermatology workforce demographics. Using  $\chi^2$  and  $t$  tests, we compared variables of interest in our data set to those from a representative sample of the US general dermatology workforce (N=1146) collected by the American Academy of Dermatology Association.<sup>2</sup>

## Results

Of the 107 chairs and chiefs e-mailed, 69 (64%) returned completed surveys. Of the 69 participants who completed the survey, 59 (86%) were men and 10 (14%) were women. The average age of the survey respondents was 56 years. Information for all factors is compiled in the Table.

Compared to the dermatology workforce,<sup>2</sup> dermatology chairs and chiefs are on average older (56 vs 50.7 years;  $P < .001$ ), more likely to be men (86% vs 64.1%;  $P < .001$ ), more likely to be board certified in other fields (24.6% vs 15.6%;  $P < .001$ ), more likely to have received training in dermatopathology (16% vs 4.4%;  $P < .001$ ), and more likely to specialize in Mohs micrographic surgery (13% vs 9.5%;  $P < .001$ ).

## Comment

The response rate for our study among chairs and chiefs of US dermatology programs was robust for the survey method. Based on the survey data, we were able to characterize the dermatology chairs and chiefs segment of the dermatology workforce as follows: (1) most are male (86%); (2) most are white (87%) born in the United States (83%); (3) nearly half (46%) are board certified in another specialty or subspecialty; (4) nearly one-third (32%)

---

Dr. Alikhan is from the Department of Medical Education, MacNeal Hospital, Berwyn, Illinois. Mr. Ghods and Dr. Armstrong are from the School of Medicine, University of California Davis Health System, Sacramento. Dr. Armstrong is from the Department of Dermatology. The authors report no conflict of interest.

Correspondence: April W. Armstrong, MD, Department of Dermatology, University of California Davis Health System, 3301 C St, Ste 1400, Sacramento, CA 95816 (aprilarmstrong@post.harvard.edu).

### Demographic, Educational, and Academic Factors of Dermatology Chairs and Chiefs

	Men (n=59)	Women (n=10)	Total (N=69)
Average age, y	56	56	56
Born in United States, n (%)	49 (83)	8 (80)	57 (83)
Race/ethnicity, n (%)			
White	50 (85)	10 (100)	60 (87)
African or African American	2 (3)	0 (0)	2 (3)
Asian or Asian American	4 (7)	0 (0)	4 (6)
Latino or Hispanic	2 (3)	0 (0)	2 (3)
Iranian American	1 (2)	0 (0)	1 (1)
Average age of dermatology residency completion, <sup>a</sup> y	31	31	31
Graduated from US dermatology residency, n (%)	57 (97)	10 (100)	67 (97)
Certification in another field, n (%)			
None	30 (51)	7 (70)	37 (54)
Internal medicine	13 (22)	0 (0)	13 (19)
Dermatopathology	6 (10)	2 (20)	8 (12)
Dermatologic immunology	4 (7)	0 (0)	4 (6)
Pediatrics	3 (5)	1 (10)	4 (6)
Dermatopathology and anatomic pathology	2 (3)	0 (0)	2 (3)
Dermatopathology and immunology	1 (2)	0 (0)	1 (1)
Average age of appointment to chair/chief position, y	45	46	45
Additional postgraduate degrees (excluding MD), <sup>b</sup> n (%)			
None	41 (71)	5 (50)	46 (68)
PhD	9 (16)	1 (10)	10 (15)
MS	1 (2)	2 (20)	3 (4)
MPH	3 (5)	0 (0)	3 (4)
JD	1 (2)	0 (0)	1 (2)
MBA	0 (0)	0 (0)	0 (0)
Other	3 (5)	2 (20)	5 (7)

	Men (n=59)	Women (n=10)	Total (N=69)
Primary self-classification, <sup>c</sup> n (%)			
Clinician educator	24 (41)	4.3 (43)	28.3 (41)
Clinician investigator (basic science research)	21 (36)	4 (40)	25 (36)
Clinician investigator (clinical research)	12 (20)	1.3 (13)	13.3 (19)
Clinician	1 (2)	0.3 (3)	1.3 (2)
Scientist	1 (2)	0 (0)	1 (1)
Primary subspecialty of dermatology, <sup>d</sup> n (%)			
General dermatology	37 (64)	7.5 (75)	44.5 (65)
Mohs micrographic surgery	7.5 (13)	1 (10)	8.5 (13)
Dermatopathology	6 (10)	0.5 (5)	6.5 (10)
Pediatric dermatology	4 (7)	1 (10)	5 (7)
Immunodermatology	3 (5)	0 (0)	3 (4)
Cosmetic dermatology	0.5 (1)	0 (0)	0.5 (1)
Prior NIH funding, n (%)			
R01 as principal investigator <sup>e</sup>	25 (74)	4 (80)	29 (74)
Number of R01 grants <sup>f</sup>	5	10	5.4
NIH funding during prior 5 years	24 (69)	4 (80)	28 (70)

Abbreviation: NIH, National Institutes of Health.

<sup>a</sup> Only 50 men and 7 women provided this information.

<sup>b</sup> 68 of 69 participants answered this question.

<sup>c</sup> 1 person chose 3 primary self-classifications, so three-tenths of a point was added to each of the 3 categories they selected.

<sup>d</sup> For primary subspecialty of dermatology, 2 respondents chose 2 categories; half a point was added to each of 2 categories they selected.

<sup>e</sup> One male participant did not answer this question.

<sup>f</sup> Average of respondents: 23 men; 2 women; 25 total.

have advanced degrees in addition to doctor of medicine; (5) more than half (56%) are actively engaged in research; (6) nearly one-third (35%) are subspecialists; (7) most have received National Institutes of Health funding (58%); and (8) of those who have received National Institutes of Health funding, most (70%) have received funding in the 5 years prior to completing the survey. Our data were similar to chairs in anesthesiology,<sup>3</sup> ophthalmology,<sup>4</sup>

and plastic surgery<sup>5</sup> for male predominance, age of appointment to chair or chief position, and advanced degrees in addition to doctor of medicine.

Dermatology chairs and chiefs serve as role models in academic medicine and they influence advancement of research and dermatologic education. Although it is difficult to determine if the aforementioned demographic, educational, and subspecialty factors contributed directly to their

academic leadership positions, identification of these factors allows us to better understand this segment of the dermatology workforce.

*Acknowledgments*—We would like to thank Jim Kostecki, MS, and Terri Zylo, SRS, from the American Academy of Dermatology, Schaumburg, Illinois, for their invaluable assistance in this project.

### REFERENCES

1. Turner E, Yoo J, Salter S, et al. Leadership workforce in academic dermatology. *Arch Dermatol*. 2007;143:948-949.
2. Kostecki J. 2007 Report. *Dermatology Practice Profile Survey*. Schaumburg, IL: American Academy of Dermatology Association; 2007:40.
3. Mets B, Galford JA, Purichia HR. Leadership of United States academic anesthesiology programs 2006: chairperson characteristics and accomplishments. *Anesth Analg*. 2007;105:1338-1345, table of contents.
4. Cruz OA, Johnson NB, Thomas SM. Twenty-five years of leadership: a look at trends in tenure and appointments of chairs of ophthalmology. *Ophthalmology*. 2009;116:807-811.
5. Addona T, Polcino M, Silver L, et al. Leadership trends in plastic surgery. *Plast Reconstr Surg*. 2009;123:750-753.