Table II. Odds of geriatric fellowship programs offering dermatology educational experiences based on the presence of a dermatology residency program

Presence of dermatology residency program	Dermatology education experience	Odds ratio	95% Confidence interval
Yes	Presence of dermatology clinical experience	1.07	0.36-3.20
Yes	>5 half-day dermatology clinic sessions	4.12	1.01-16.76*
Yes	Presence of a dermatology subspecialty education coordinator	1.10	0.99-1.23
Yes	Formal dermatology didactic lectures	1.36	0.46-4.04
Yes	Dermatology procedural skills workshops	1.36	0.46-4.04
Yes	Board review	0.78	0.26-2.32
Yes	Experiences in outpatient dermatology clinic	2.51	0.75-8.43
Yes	Experiences in inpatient dermatology consultation services	0.96	0.87-1.05
Yes	Dermatology faculty discussants at clinical teaching conferences	1.79	0.31-10.15

*$P < .05$.

their fellowship programs, and of those that did, only 14% (5/35) had mandatory clinical experiences. Although the presence of a dermatology residency was associated with longer dermatology clinical experiences, geriatrics programs do not need to have an associated dermatology program or subspecialty coordinator to implement dermatology clinical experiences. Our survey's somewhat low response rate might have led to bias, though the respondents reflected the national distribution. Dermatologists should consider increasing their involvement in dermatology education in geriatrics training to augment effective care for skin disease in the growing elderly population.

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Predicting future dermatology academic productivity from medical school publications

To the Editor: Dermatology residency programs use applicants' research productivity as medical students as a metric to approximate academic curiosity. Although surgery residency programs documented an association,[1] internal medicine fellowships and neurosurgery residencies found student research weakly predictive of productivity and academic careers.[2,3] In dermatology, a recent study identified an association between medical school research and academic careers.[4] The objective of this study was to evaluate whether research output during medical school was predictive of later research productivity in dermatology.

We identified 426 American Board of Dermatology 2013 diplomates. For each, through internet search, we documented medical school and residency program; completion of PhD, another residency, or fellowship; and current employment at academic institutions. Top 25-medical school attendance was coded per 2019 *U.S. News and World Report* rankings.

Each dermatologist's publication record was queried in PubMed before residency (defined before May 2009), during residency (July 2009 to June 2013),

Table I. Demographics and publication history of the cohort

Variable	Results
2013 dermatology residency graduates, No. (%)	426 (100)
Top 25 medical school, No. (%)	121 (28)
Sex, No. (%)	
Male	153 (36)
Female	273 (64)
PhD, No. (%)	20 (5)
Fellowship, No. (%)	116 (27)
Procedural dermatology, No. (%)	59 (14)
Dermatopathology, No. (%)	29 (7)
Pediatric dermatology, No. (%)	20 (5)
Cosmetic dermatology, No. (%)	8 (2)
Currently employed at an academic institution, No. (%)	126 (30)
Preresidency publications, mean (SD), No.	
Total publications	1.26 (2.34)
First-author publications	0.64 (1.38)
High-impact publications	0.26 (0.89)
Case reports	0.25 (0.76)
Original research articles	0.20 (0.86)
Other articles	0.38 (1.25)
Postresidency publications, mean (SD), No.	
Total publications	4.23 (10.56)
First-author publications	1.12 (3.38)
High-impact publications	1.46 (4.29)
Case reports	1.55 (2.70)
Original research articles	0.96 (3.80)
Other articles	1.72 (6.06)

No., Number; *SD*, standard deviation.

and after residency (after July 2013). We coded publication number, first-authorship publications, high-impact publications, and types of publications defined as case reports and series, original research articles, and other (research letters and reviews).

The cohort demographics are reported in Table I. In multivariable logistic regression analysis, female sex (odds ratio, 1.64; 95% confidence interval, 1.02-2.63) and increasing number of publications as first author (odds ratio, 1.45; 95% confidence interval, 1.04-2.03) were positively associated with academic institution employment. Increasing number of case reports (odds ratio, 0.50; 95% confidence interval, 0.29-0.84) was negatively associated with academic institution employment. Increasing number of preresidency first-author and high-impact publications were associated with postresidency publication productivity, whereas increasing number of preresidency case reports was negatively associated with postresidency publication productivity (Table II).

Table II. Association of preresidency publication history with subsequent career in academics and later total publications, first-author publications, original article publications, and high-impact publications

		Postresidency productivity			
Variable	Employment at academic institution, OR (95% CI)*	Total publications, OR (95% CI)†	First-author publications, OR (95% CI)†	Original article publications, OR (95% CI)†	High-impact publications, coefficient (95% CI)†
Top 25 medical school	1.50 (0.93-2.42)	0.85 (−1.67 to 3.36)	0.21 (−0.79 to 1.20)	0.16 (−0.67 to 0.99)	0.44 (−0.51 to 1.39)
Female	1.64 (1.02-2.63)	−0.88 (−3.21 to 1.46)	−0.34 (−1.27 to 0.58)	−0.32 (−1.10 to 0.45)	−0.57 (−1.46 to 0.31)
PhD	1.75 (0.62-4.99)	1.04 (−4.76 to 6.84)	−0.40 (−2.70 to 1.90)	1.75 (−0.17 to 3.67)	0.28 (−1.91 to 2.48)
Total publications	1.11 (0.90-1.36)	0.37 (−0.63 to 1.37)	0.39 (−0.01 to 0.78)	0.32 (−0.01 to 0.65)	0.24 (−0.14 to 0.61)
First-author publications	1.45 (1.04-2.03)	2.28 (0.74-3.83)	0.37 (−0.25 to 0.98)	−0.13 (−0.64 to 0.38)	0.77 (0.19-1.35)
High-impact publications	1.06 (0.67-1.68)	2.16 (−0.13 to 4.45)	1.24 (0.33 to 2.15)	0.89 (0.13 to 1.64)	1.28 (0.42-2.15)
Case reports	0.50 (0.29-0.84)	−2.21 (−4.19 to −0.24)	−0.45 (−1.23 to 0.33)	−0.61 (−1.26 to 0.05)	−0.76 (−1.51 to −0.01)
Original research articles	0.95 (0.59-1.52)	−0.05 (−2.25 to 2.14)	−0.26 (−1.13 to 0.61)	0.47 (−0.26 to 1.19)	0.18 (−0.65 to 1.02)
Other articles	0.81 (0.62-1.07)	0.23 (−1.43 to 1.90)	−0.30 (−0.96 to 0.36)	−0.65 (−1.20 to −0.09)	−0.07 (−0.70 to 0.56)

CI, Confidence interval; *OR*, odds ratio.
*Multivariable logistic regression models evaluated for associations between preresidency publication history and subsequent employment at academic institutions
†Multivariable linear regression models evaluated associations between preresidency publication history and subsequent research productivity.

Our data suggest residency programs seeking to recruit residents into academic productivity and careers should place high value on first-author and high-impact publications. Further, applicants with more publications are more likely to maintain productivity and pursue employment at academic institutions.

Our data also suggest quality of research is particularly important. Supporting this trend is the observation that increasing number of preresidency case reports is negatively associated with later research productivity. Thus, not all publications are created equal. Also, publication number per applicant has increased in dermatology over time,[5] prompting the question whether applicants are inflating resumes or simply accumulating less impactful work.

Study limitations include use of publication number and academic institution employment as surrogate end points for academic productivity. Academic productivity certainly extends far beyond publications and specific employment. Further, although our estimate of dermatology graduates working for academic institutions (30%) is greater than previous estimates, this may reflect a trend of academic health systems buying private practices. Of note, if this pool of graduates includes those affiliated but not truly involved with academics, it may bias our results against finding significant differences and thus strengthen the validity of our findings.

Although residency programs should take a holistic approach to evaluating applicants beyond grades, test scores, and publication number, this study should inform programs desiring to recruit and students wishing to become academic dermatologists to value greater impact research projects and productivity in medical school.

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Factors contributing to cancer worry in the skin cancer population

To the Editor: Cancer worry is a psychological response seen in patients diagnosed with all cancer types.[1] Although skin cancers are associated with overall low morbidity and mortality, the potential for further spread and recurrence may be a source of notable distress in patients.[2] Our objective was to characterize cancer worry and its demographic and medical correlates in the skin cancer population using a patient-reported outcome measure, the FACE-Q Skin Cancer.

All patients with biopsy-proven skin cancers presenting for dermatologic surgery at a tertiary cancer center were consecutively recruited. All participants prospectively completed the Cancer Worry scale[3] between March 1, 2017, and June 31, 2018, at baseline (before surgery), and a subset of participants completed the scale after surgery during a follow-up visit. Electronic medical records were reviewed for patient demographic, clinical, and surgical information. Comorbidity and functional status were assessed with the age-adjusted Charlson Comorbidity Index and Karnofsky Performance Scale, respectively.

The Cancer Worry Scale is part of the FACE-Q Skin Cancer Module[3] and consists of 10 items. Patient