

Nonprofit funding in dermatology: A cross-sectional analysis in the United States, 2015 to 2019



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T*o the Editor:* Though the primary source of grant funding for dermatology in the United States and many other countries remains government bodies, funding by nonprofit organizations can have a major role in advancing science and broader health advocacy.¹ However, there is limited reporting on nonprofit activities in dermatology and their impacts on the field.

We conducted a cross-sectional analysis of dermatology grant funding provided in the United States by major nonprofit organizations from 2015 to 2019. To identify organizations, we queried the Candid nonprofit database using dermatologic and other field-related keywords for those focusing on dermatology or skin disorders reporting annual revenues \geq \$1 million. US grant funding was obtained from the US Internal Revenue Service Form 990 Schedule I filings (or ProPublica for absent data). Twelve organizations reporting grants during all years were identified (Table D). Four category codes—research, education, public health/advocacy, and other (without descriptive detail on Schedule I line-item or organization webpage)—were developed to classify funding activities.

From 2015 to 2019, average annual overall funding was nearly \$27.6 million, and total funding increased by 66.5% over this period (Table D). Research received 93.9% of overall funding, whereas education, public health/advocacy, and other received 4.6%, 1.0%, and 0.4%, respectively. Funding increases were seen broadly; over the entire period, the largest percent increase was seen in research (\$9.4 million, 72.8% increase), followed by public health/advocacy (\$88.6K,

42.3%), education (\$120.5K, 10.0%), and other (\$7.6K, 5.8%). Although many disease-focused organizations contributed exclusively to research, professional societies such as the American Academy of Dermatology (AAD) tended to donate across categories (Fig 1). Research funds were provided primarily to individuals, institutions, or, less frequently, industry. Education funds largely comprised fellowships, resident grants, and support for meetings, courses, and mentorship. Public health/advocacy grants were mainly directed to sun protection initiatives.

In context, from 2015 to 2019, the US National Institutes of Health awarded \$554.2 million in dermatology-related funding,² and the identified nonprofits awarded \$137.9 million. A central question is the impact of this funding, which is not always straightforward to measure. A Dermatology Foundation study analyzing impact of Career Development Awards they provided to researchers found that each Career Development Award dollar through 2015 was linked to over \$10 of subsequently garnered federal grant support (\$12 through 2017).³ These data suggest that nonprofit-funded research efforts can have outsized multiplicative impacts. Demonstrating the impact of public health/advocacy funding, the AAD reports 505 sun-shaded structures constructed and 4 million people shaded across public schools and nonprofits since program inception.⁴ From 2015 to 2019, the AAD provided an average of 781 resident grants annually (mainly supporting AAD meeting attendance), exceeding the 527 residency positions in 2020,⁵ suggesting broad support for the advancement/future of the

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Table I. Total grants given by dermatology nonprofits* (US dollars)

	2015	2016	2017	2018	2019	Mean
Research	12,897,936	39,826,365	22,564,426	31,937,562	22,291,506	26,335,844
Education	1,205,929	1,311,811	1,300,752	1,224,057	1,326,421	1,403,419
Public health/advocacy	209,543	200,364	245,824	492,317	298,122	292,034
Other	130,950	97,219	97,516	127,825	138,552	133,134
Total	14,444,358	41,435,759	24,208,518	33,781,761	24,054,601	27,584,999

*Organizations include Dermatology Foundation, American Academy of Dermatology, American Skin Association, AIM at Melanoma, American Society for Dermatologic Surgery, Melanoma Research Foundation, Melanoma Research Alliance, American Society of Dermatopathology, Women’s Dermatologic Society, National Psoriasis Foundation, National Eczema Association, and National Alopecia Areata Foundation.

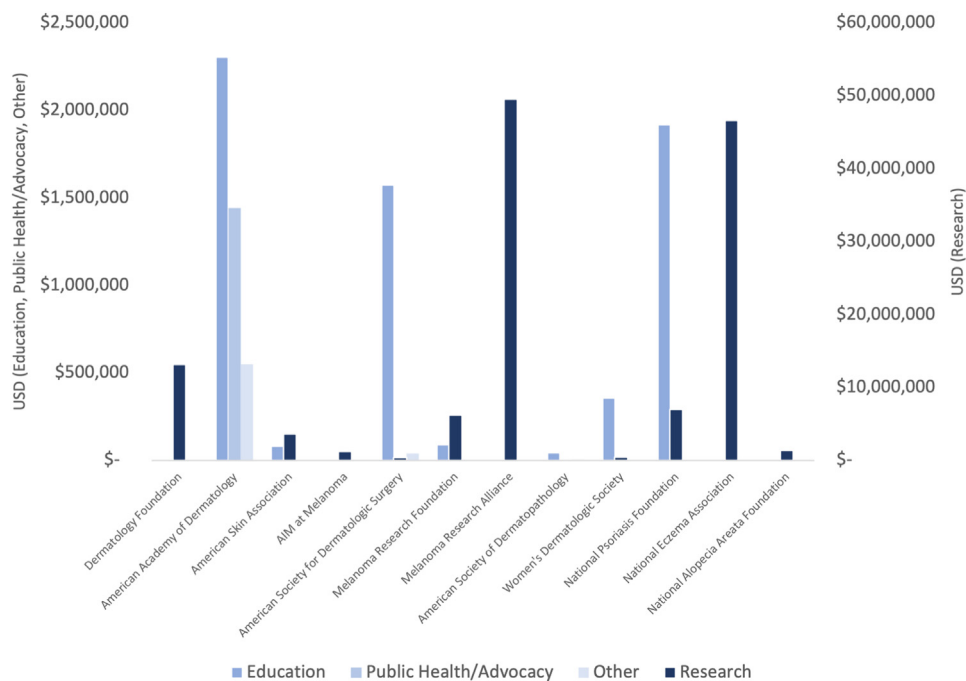


Fig 1. Dermatology nonprofit contributions by category (2015-2019, combined). USD, US dollar.

specialty. Similar quantitative studies, impact tracking, and needs assessments may be important to promote further giving in areas of maximal impact/demand on the part of donors in a virtuous cycle positively impacting research, education, and the public. Due to 990 form processing delays (COVID-19–related and otherwise), data herein did not extend beyond 2019. Therefore, COVID-19 impacts and subsequent financial system challenges on donations/grant funding by these entities remain to be seen. Although the data presented address the scope and distribution of nonprofit funding for dermatology in the United States (and of course scientific discoveries advance the field globally), they illustrate the role that such organizations can play in augmenting traditional government funding, and we hope that our work stimulates colleagues in

other countries to perform and publish similar analyses.

Data availability

Data related to this article can be found at <https://www.guidestar.org> hosted by Candid, <https://www.irs.gov/charities-non-profits/tax-exempt-organization-search> hosted by the United States government, and <https://projects.propublica.org/nonprofits/> hosted by ProPublica, Inc.

Conflicts of interest

Author Agarwal has no conflicts of interest to declare. Dr Orlow serves on the boards of Almirall Srl and R2 Technologies, Inc, as a senior adviser to Pharos Advisors, and has served on the Board of Trustees of the Dermatology Foundation from 2009 to 2020.

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