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# The American Journal of Surgery

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## Invited Commentary

### Commentary on: The Association of Women Surgeons research grant: An analysis of the first 25 years

The Association of Women Surgeons was formed in 1981, and has grown into an international organization dedicated to the professional development of women surgeons across the spectrum of career and training. Its three core tenants are to support women surgeons to “Engage, Empower and Excel.” One key partnership core to these tenets has been the Ethicon-sponsored AWS research grant, which has been awarded annually since 1996 to one member through a competitive process of submission review by the AWS Grants and Fellowships Committee.

In this manuscript, the authors review the impact of this award on the academic productivity of the women who have been awarded this grant.<sup>1</sup> A retrospective analysis was performed, comparing recipients of the award to applicants over the same time period. Those who received the award were more likely to have successful subsequent NIH funding, produce a greater number of publications, and publish in higher impact journals. The H index of recipients and nonrecipients, however, was no different. Naturally, there could be a recipient bias – those with higher credentials are more likely to get the award and would have more funding and publications whether or not they received the AWS award. Despite this limitation, the paper underscores the point that these have been wise investments in strong future leaders, and have given these women the opportunities to build the foundations of their research endeavors.

The importance of offering grants restricted to the membership of an underrepresented group cannot be understated.<sup>2</sup> Other such awards exist, and provide similar career-building opportunities. I, myself, was the recipient of the Claude Organ Traveling Fellowship of the American College of Surgeons, which provided a career-changing opportunity for me. In fact, numerous current leaders in surgery were recipients of that award early in their careers. Many successful surgeon scientists discuss the time when they were “given a chance” early in their career, subsequently turning an early investment into a large return.<sup>3</sup>

Much literature indicates that early career funding is key to future success in academic surgery.<sup>4–8</sup> Riccardi et al. recently published data indicating that there is still significant disparity in awards to surgical junior faculty, with 67% of awards still being given to men.<sup>9</sup> As long as these disparities exist, it is critical to offer underrepresented groups research opportunities that are demographic-specific. Not only do women deserve to have protected grants, but all underrepresented minorities in medicine,

including African American, LatinX, Asian, and LGBTQ groups. Specific funding should also be available to seek to understand the reasons for the disparities we see in medicine and develop strategies to mitigate them. It is well documented that diverse teams create better science, more effective healthcare delivery, and improved outcomes, which are the goals of all of medicine.

#### Declaration of competing interest

I, Stephanie Bonne, MD, FACS, have no conflicts of interest regarding this research and have no financial disclosures to report related to this work.

#### References

1. Shaikh S, Emanuelle J, Lal G, Rodriguez L, Huhges M, Tatebe L. The association of women surgeons research grant: an analysis of the first 25 years. *Am J Surg.* 2020 Oct;220(5):1146–1150.
2. Oslock W, Paredes A, Baseline H, et al. Women surgeons and the emergence of acute care surgery programs. *Am J Surg.* 2019 Oct;218(4):803–808.
3. Saamia S, Adel E. Women trauma surgeons: penetrating the glass ceiling. *Am J Surg.* 2020 Jun;220(5):1361–1363.
4. Zarzur B, Valsangkar N, Feliciano D, Koniaris G. The transforming power of early career acute care surgery research scholarships on academic productivity. *J Trauma Acute Care Surg.* 2016 Jul;81(1):137–143.
5. Jones D, Mack M, Patterson GA, Cohn LH. A positive return on investment: research funding by the Thoracic Surgery Foundation for Research and Education (TSFRE). *J Thorac Cardiovasc Surg.* 2011 May;141(5):1103–1106.
6. Colaco M, Svider PF, Mauro KM, Eloy JA, Jackson-Rosario I. Is there a relationship between National Institutes of Health funding and research impact on academic urology? *J Urol.* 2013 Sep;190(3):999–1003.
7. Kim S, Li B, Rosoklija I, et al. Federal research funding and academic productivity in pediatric urology: from early career to research independence. *J Pediatr Urol.* 2019;15:233–239.
8. Sweeney WM, Cederna PS, Losee JE, et al. The academic scholar award of the American association of plastic surgeons: the first 20 years. *Plast Reconstr Surg.* 2015;135:438e–444e.
9. Riccardi J, Farber N, Ho V, Bonne S. Uncovering disparities in scholarly productivity among junior surgical society grant recipients. *J Surg Res.* 2020 Aug 17;257:128–134.

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