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Commentary: National Institutes of Health funding and the American Association for Thoracic Surgery

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In the current climate of medicine, increasing concerns have been expressed regarding the potential for substantial attrition of the academic surgeon. In addition to regional and federal shifts in what is considered valuable regarding clinical care benchmarks (which do not take research productivity into account), the paylines from major granting agencies such as the National Institutes of Health (NIH) have tightened, making it increasingly difficult for busy clinicians to successfully compete for research funding, especially in the basic science realm.^{1,2} For cardiothoracic surgeons, our major societies have responded with development and execution of programs designed to encourage, provide education for, and to some extent, fund research endeavors. At the forefront of these societies is The American Association for Thoracic Surgery (AATS) which, through its annual meeting, Scientific Affairs and Government Relations (SAGR) Committee activity, academic development programs (Grant Writing Workshop, Clinical Trials Course, Innovation Summit), and funding initiatives, has prioritized the fostering and promulgation of ongoing academic advancement in our specialty.

In this issue of the *Journal*, Mehaffey and colleagues³ hypothesized that AATS activities have helped to

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CENTRAL MESSAGE

The efforts of the American Association for Thoracic Surgery have contributed to successfully funded research grant applications by cardiothoracic surgeons to the National Institutes of Health.

increase NIH grants awarded to cardiothoracic surgeons. For this analysis, the authors developed a database of 1869 academic cardiothoracic surgeons in the United States to December 2020 in addition to concomitant NIH grant records for each surgeon from 1985 to 2020. After normalizing the data to active surgeons, the results showed that 346 cardiothoracic surgeons have received 696 NIH grants totaling more than \$1.5 billion in funding. The prevalence of research grants, percentage of surgeons with a research grant, and number of research grants per funded surgeon were all seen to have increased in the time after the formation of SAGR. These results were not limited just to established surgeons, as increases in federal young investigator awards such as K grants were also seen in the SAGR era. Increases in grant awards were demonstrated for surgeons who participated in AATS programs compared with those surgeons that did not.

The aforementioned report was the result of a large corpus of work for which the authors are to be congratulated. Although the data are quite compelling, they are only able to demonstrate a correlation and not a causal relationship between AATS activities and increased grant support and did not distinguish between basic science research and clinical research grants. Further, it must be considered

that, in addition to the AATS, other cardiothoracic surgical societies and entities were also implementing measures to boost academic development and as such, the increase in NIH funding awarded to cardiothoracic surgeons over recent decades can only be attributed in part to AATS activities.

Taking all of the aforementioned into account, it is apparent that the focused efforts of our societies such as the AATS to support research have had a measurable impact. These programs are more important than ever as young and established academic surgeons alike struggle

to continue their research efforts under increasingly challenging circumstances.

References

1. Ikonomidis JS, Menasché P, Kreisel D, Sellke FW, Woo YJ, Colson YL. Attrition of the cardiothoracic surgeon-scientist: definition of the problem and remedial strategies. *J Thorac Cardiovasc Surg.* 2019;158:504-8.
2. Ikonomidis JS. Solutions for surgeon scientists. *J Thorac Cardiovasc Surg.* 2020; 159:1917-20.
3. Mehaffey JH, Wang H, Narahari AK, Bajaj SS, Chandrabhatla AS, Krupnick AS, et al. The impact of the American Association for Thoracic Surgery on National Institutes of Health grant funding for cardiothoracic surgeons. *J Thorac Cardiovasc Surg.* 2023;165:1885-96.e7.