

## Attracting the Best New Science in the Specialty

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**F**INDING information is not difficult. Finding authoritative information you can trust is. For this reason, medical journals that publish research spend considerable effort trying to attract the highest quality science they can and then refine it through peer review. Although ANESTHESIOLOGY added several types of review articles with the establishment of an education section 5 yr ago, its primary mission is to attract and promote new discoveries of relevance to anesthesiologists. It is true that medical scientific journals can only publish what is sent to them, but from the authors' perspective, it is a free market and they choose where to send their best work based on several factors. In this article, I want to briefly review how ANESTHESIOLOGY has targeted these factors to improve the quality of the journal you receive as an American Society of Anesthesiologists (ASA) member.

Identifying factors important to authors and how journals address these factors are easy. A few years ago we surveyed authors who frequently submit to ANESTHESIOLOGY and led focus discussion groups of authors who publish with us and with high impact general medical or science journals, such as *Nature* or *New England Journal of Medicine*. We found, as have others, that what is most important to authors is the prestige of the journal, the audience it reaches, and the speed with which their submissions are reviewed. We also found common concerns among authors with ANESTHESIOLOGY, including slow turnaround time and the perception that the readers they want to reach don't open the journal. They further noted that although ANESTHESIOLOGY is the most prestigious journal in the specialty, its impact factor of approximately 4 at the time was low. With the initial help of a consultant, we established a strategic planning and implementation process to address these concerns.



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The time from submission to first decision for manuscripts took months in the paper era and shrunk rapidly to weeks with Web-based manuscript processing, but it varies considerably from journal to journal. We instituted two changes to speed this turnaround time while maintaining a high standard of peer review. First, editors were encouraged to use two rather than three expert reviews in addition to their own review, and the proportion of manuscripts using two reviewers plus the editor increased from 5% in 2009 to over 60% currently. Second, authors are not pleased when their articles are rejected, but they are especially unhappy if it takes a long time to receive a rejection notice. We instituted a triage option whereby the editor can decide to reject an article themselves or with only one external review, if they feel it is highly unlikely to be accepted. This triage option, frequently used at other major journals, now accounts for nearly 25% of decisions at ANESTHESIOLOGY. Over less than 5 yr, these changes have reduced the time from first decision from 40 to 20 days. We have also improved the time between acceptance and online publication, currently around 20 days.

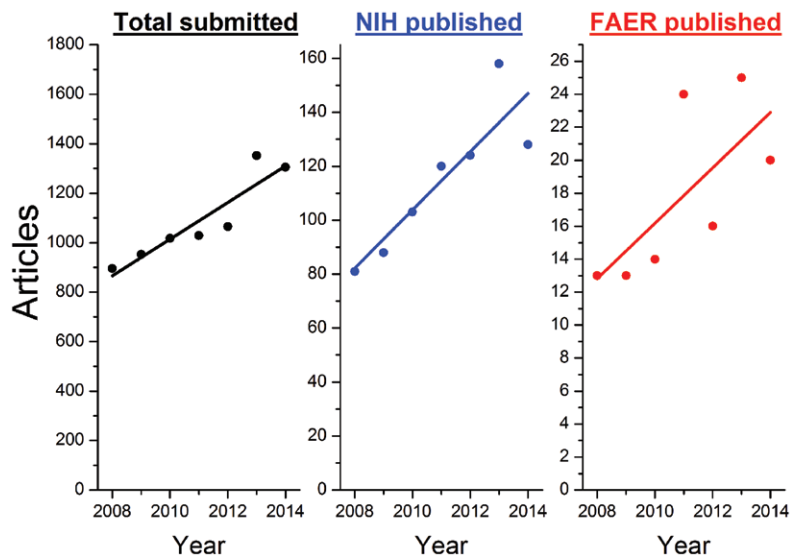
Authors want their work to be noticed, and even authors of basic science articles submitting to ANESTHESIOLOGY want clinicians to be aware of the progress they are making to advance the specialty. The most recent ASA member survey from 2012 showed that most members *do* open ANESTHESIOLOGY and at least scan its content, yet in-depth surveys conducted by our publisher show that many members consider the work published in ANESTHESIOLOGY to be irrelevant to their clinical practice or their patients. Over the past 8 yr, we have made many changes to the journal to increase its appeal to clinicians, with more emphasis on review and educational content, which now comprises nearly 40% of the articles in

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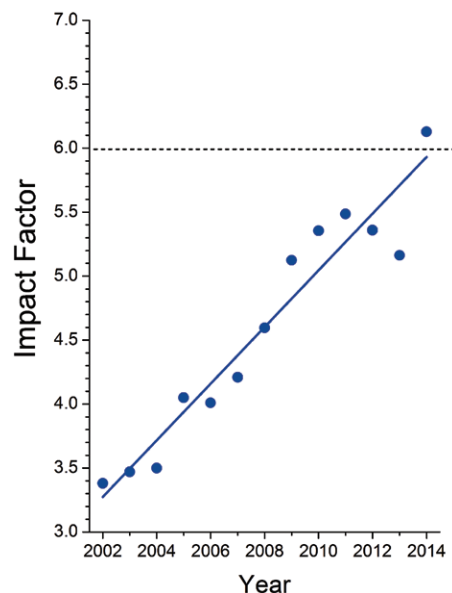
**Fig. 1.** Original investigation articles submitted to *ANESTHESIOLOGY* and articles published which cite support from the National Institutes of Health (NIH) or the Foundation for Anesthesia Education and Research (FAER) over the past 7 yr.

the journal, including three-sentence reviews of important articles from outside the specialty, infographics, and a creative writing section on the art and humanity side of our medical practice. For original research, we now provide an 80-word summary on what is known on the topic and what the article tells us that is new. We recently moved to a new digital platform with responsive Web design so that journal content is delivered in a readable, attractive manner regardless of the screen size of the device being used. And we have reached out to patients and the general public with regular press releases from the ASA, highlighting new discoveries in the journal of relevance to public health.

Assessing whether strategies work requires measurement tools, and the ones we have chosen to apply are the number of submissions of original research to *ANESTHESIOLOGY*, as well as the number of submissions of high quality. One measure of high-quality research is work that has successfully competed for extramural support, and we have chosen the number of articles we publish that are supported by grants from the National Institutes of Health and Foundation for Anesthesia Education and Research as that metric. By these metrics, there has been a large, positive change over the past several years (fig. 1). The increase in National Institutes of Health- and Foundation for Anesthesia Education and Research-supported work is particularly striking, given stagnant or reduced numbers of grants by these organizations in the same period.

From an author's perspective, journal prestige is measured by the impact factor, an assessment of citations released annually that is roughly the ratio of citations to articles in the journal divided by the number of articles published. Some journals manipulate content, timing of publications, and self-citations to increase their impact factor. At *ANESTHESIOLOGY*, we have focused on quality, only publishing material that is rated as the most important scientifically, regardless of whether it is

or is not expected to be highly cited. This, coupled with the increased number of education-related articles, has reduced the number of original investigations we publish to approximately 17 per month. In addition, we have proactively tried to attract submissions in important areas of clinical and basic science research through journal symposia at the ASA Annual Meeting and through Calls for Papers. There are two currently active Calls for Papers, one on Accelerated Recovery, guest edited by Dr. Henrik Kehlet, and the other on Health Care Redesign and the Anesthesiologist, guest edited by Drs. James Rathmell and Warren Sandberg. We believe that these efforts, coupled with those of better author service and attempts to better reach readers, have led to the rapid increase in the impact factor for *ANESTHESIOLOGY* (fig. 2). In many



**Fig. 2.** Impact factor for *ANESTHESIOLOGY* for the past 13 yr.

institutions and countries, more academic credit and even financial support go to publications in journals with impact factors above 6, so breaking that threshold for the first time last year will likely lead to even greater success in the future.

In the end, our mission remains to promote new discovery that advances our understanding and care of our patients. To do this, we must first attract the best work we can. At *ANESTHESIOLOGY*, we are not a sieve, passively responding to material sent to us. Rather, a dedicated group of editors, associate editors, reviewers, and staff are actively trying to improve author service, journal readability, and journal

outreach so that we can provide you the best and most exciting new science we can. Stay tuned!

### Competing Interests

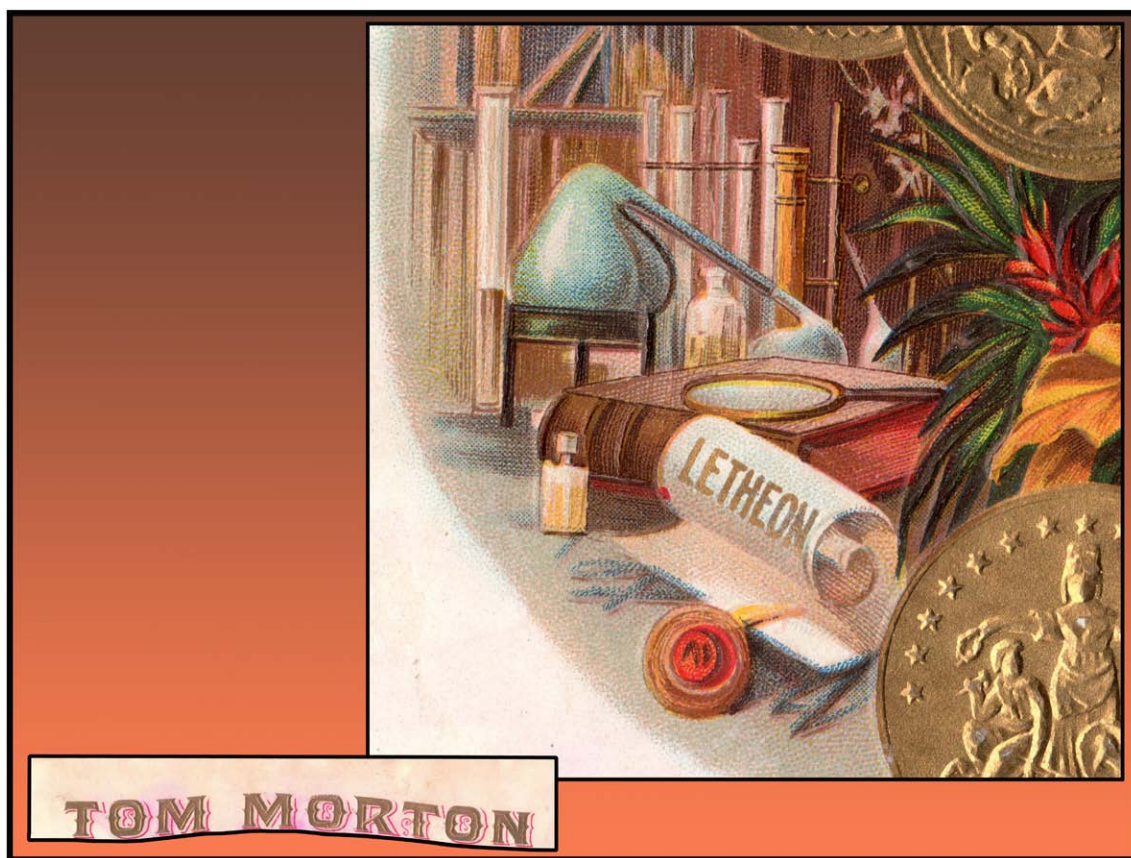
Dr. Eisenach is the Editor-in-Chief of *ANESTHESIOLOGY*, and his institution receives salary support from the American Society of Anesthesiologists (Schaumburg, Illinois) for this position.

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## ANESTHESIOLOGY REFLECTIONS FROM THE WOOD LIBRARY-MUSEUM

### From Greek to Arabic: “Tom Morton” Cigar Box Label, Part I



The left side of the “Tom Morton” cigar box label includes items related to Greek mythology and Arabic alchemy. Derived from Lethe, the Greeks’ name for their mythological river of forgetfulness, “LETHEON” is inscribed across what appears to be a scrolled up patent or paper (above), presumably penned by ether pioneer William Thomas Green Morton (WTGM). Synthesis of sulfuric ether originally involved alchemical glassware, the name of which changed from the ancient Greek word “ambyx” to the Arabic “al-anbīq” to the English “alembic.” But what about WTGM’s name? Was he ever nicknamed “Tom Morton”? (Copyright © the American Society of Anesthesiologists, Inc.)

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