# The Section of Scientific **Publications at the Texas Heart** Institute

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# Abstract

The Section of Scientific Publications is a service within the Texas Heart Institute created to help our roughly 200 clinicians and scientists present, publish, and obtain funding for their research. We provide substantive and language editing, scientific writing services, and other services that make publication easier. In this article, we describe how the Section of Scientific Publications was built and how it operates.

**Keywords:** Editing, Editorial services, Publications, Publication rate, Writing

Located at the Texas Heart Institute (THI) in Houston, Texas, USA, the Section of Scientific Publications (SciPubs) is a group dedicated to helping authors present, publish, and obtain funding for their work. Scientific Publications provides editorial support and a host of other services.

SciPubs was started in 1981 by Marianne Mallia, BA, ELS, although the seeds were planted in 1976 when Ms Mallia went to work as a research coordinator in THI's Cullen Cardiovascular Surgical Research Laboratory, which had been established and was directed by John C. Norman, MD. Over the next few years, as it became clear that the front-line researchers, largely biomedical engineers, were not able to write up their results as quickly as they could produce them, Ms Mallia's job gradually shifted from coordinating studies to editing and writing medical journal articles.

When Dr Norman left THI in 1981, Ms Mallia went to work for THI founder and surgeon-inchief Denton A. Cooley, MD. She hired a second editor to take over her editorial work with the cardiovascular research lab. In 1989, a third editor was added, and at that point, SciPubs was formed, with Ms Mallia as its manager.

Gradually, the section grew, adding more editors, an assistant position, and even an internship program. Today, the SciPubs staff consists of six manuscript editor/writers, a grant editor/writer, and an editorial assistant. Five of the editors have advanced degrees in the sciences (including four with PhDs), and four are certified by the Board of Editors in the Life Sciences.

Although SciPubs' editors have diverse educational backgrounds, we have increasingly hired those with degrees in the basic sciences, which is the fastestgrowing area of research at THI. Two of our editors, who formerly worked in our office in Houston, now work off-site-one a few hundred miles away in Dallas, the other thousands of miles away in Germany.

## What we do at SciPubs

SciPubs was created to benefit THI and its medical and scientific personnel by making it possible to publish more and better reports of their work. Although SciPubs began as a writing service, it now provides both editing and writing services, with editing constituting the bulk of our work.

Within SciPubs, the same people provide both writing and editing services. We edit any type of academic material, including journal articles, books, book chapters, monographs, conference abstracts, posters, slide sets, and grant proposals. Typically, authors email their manuscript to us, an editor is assigned, and if the project is of standard length (e.g., a typical journal article), the manuscript is edited and returned to the author within 2 weeks. The shortest projects (mainly conference abstracts) are returned within 24 hours. Authors can work with us via email, by phone, or in person.

We perform several levels of editing. We emphasise accuracy and consistency in grammar and usage, organisation and content, data reporting, reference citation, and the content and appearance of figures and tables. These tasks include ensuring that terms are used consistently throughout the

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manuscript, that the data reported in the abstract are consistent with those reported in the main text and the tables, and that statistics are reported properly. The editors query authors regarding issues they might find in the presentation of the data or in how the discussion is worded, for example. These are substantive suggestions. Once the authors receive the edited manuscript, make any additional changes they wish, and address any questions raised by the editor, the editor reviews the manuscript again and, if no further problems are identified, finalises it for submission.

Several of our editors are experts in the field in which they edit. These editors are generally called upon by their authors to help draft the manuscript. For some projects, they may draft only sections or tables; for other projects, such as a review article, they may write the entire first draft. In these cases, they are included as co-authors or are acknowledged for their contributions to the writing of the piece.

In addition to editing and writing, we ensure that papers meet publishers' formatting requirements, draft cover letters for submissions, submit manuscripts on authors' behalf, track the submitted manuscripts to make sure they are reviewed in a timely fashion, edit revised drafts and 'response to the reviewers' letters, and review galley proofs. Our editorial assistant handles many of these tasks, obtains written permission for authors to reproduce previously published materials, and communicates with journal staff and publishers, allowing the editors to focus on editing.

Most editing is done in Microsoft Office software, and we use EndNote for references. All projects are tracked in a Microsoft Access database. Access queries are used by the editorial assistant to prepare a monthly report of each editor's open projects so that none are neglected.

#### How we operate

All SciPubs salaries and expenses are paid for out of THI's general operating fund. SciPubs' services are available, free of charge, to all members of THI's Professional Staff and to residents, fellows, and other personnel who work with Professional Staff members on manuscripts. The decision to offer SciPubs' services without charge was made by THI's leadership in an effort to make THI especially attractive to physicians with substantial interest in research, as well as to scientists. In addition, not having a billing structure saves the time and expense involved in tracking billable hours, invoicing clients, and processing payments.

# Recruiting and training at SciPubs

Hiring new editors

Candidate editors go through a rigorous hiring process. Applicants' résumés, cover letters, and writing or editing samples are scrutinised for form as well as content. Candidates whose documents contain multiple spelling or grammatical errors are immediately rejected. Although 5 years of editorial experience is required for senior-level positions, for entry-level positions, we do not require formal work experience but tend to favour applicants with some background in editing, such as work for a university newspaper or completion of a summer internship with a publishing company.

Applicants who meet these initial requirements are brought in for an interview and for a sentence-level editing and formatting test. Next, they are sent a 'take-home' paragraph-level editing test. Applicants are selected on the basis of the results of these tests, combined with their experience, sample work, and impressions from interviews. If the candidate does not have sufficient samples of marked work to show us, we give the applicant a take-home manuscript editing test. This take-home manuscript test is given for all positions, although the tests vary depending on the job classification.

#### **Training**

The first year is a probationary period for new editors. During this time, the editor is encouraged to thoroughly review various resources relevant to our work, including the *American Medical Association Manual of Style* and several of the American Medical Writers Association's self-study modules, which cover such subjects as grammar, usage, punctuation, and statistics. In addition, the new editor's tracked changes are reviewed and commented on by a senior editor. New editors typically do not do any writing for at least 1 year.

An important aspect of training new editors is teaching them to recognise when an editorial change might affect the meaning. Sometimes, making such a change is unavoidable, particularly if the original meaning is unclear, but in such cases, the editor is instructed to indicate this to the author.

## Challenges in our work

SciPubs editors face challenges that are common in the medical communications field. We work with highly technical material that we do not always understand, so we often must educate ourselves about new topics. We frequently work with authors for whom English is not a first language. Our authors use every type of computer, various versions of Word (with various language settings), different software programs for reference management, and different email systems, and the authors use these tools with varying degrees of skill. Emailing manuscripts back and forth can also create version control problems, particularly when the editor must work directly with multiple authors on a given manuscript. Finally, authors cannot always accommodate our standard 2-week turnaround time; sometimes, manuscripts arrive mere days before a submission deadline, and we cannot always guarantee that the work we do on these rush projects will be up to our usual standards.

Recruiting editor/writers who meet our standards is another challenge. We can spend 6 to 9 months looking for someone we believe will fit in with the group and be able to be trained to do the work. As a result, we work hard at keeping our employees happy by remaining very flexible. For example, we allow flex time for daily hours, and we allow editors to work from home when they need to. We try to do other small things to make their lives easier.

#### **Benefits of SciPubs**

A challenge common to medical editors is proving that our work has value. We have plenty of anecdotal evidence in the form of comments from manuscript and grant reviewers, describing submissions as 'well written', 'logical and well organized', or 'a pleasure to read'. But more objective evidence is difficult to obtain.

Nonetheless, we have some such evidence supporting the value of our work. A few years ago, we examined the publication rate-probably the simplest metric of author success-of a surgical group that had formed at another institution but physically moved to THI and began sending manuscripts to SciPubs for editing in 2003. Using the Scopus database, we determined the number of publications produced by the group's chief surgeon each year since his first publication in 1983, through 2003 when his group joined THI, and for 6 years afterwards. We found that the chief surgeon's output remained stable at approximately five articles per year between 1983 and 2003 but that his annual publication rate increased every year thereafter, reaching 23 in 2009 (Figure 1).

Encouraged by these findings, we decided to perform an informal analysis comparing nine SciPub users and nine non-users. Included authors had published articles during the 3 years before and the 3 years after they came to THI and had less than 10% of their publications involving other authors included in the study. Users had to have used SciPubs' services at least once a year, and non-users could not have used SciPubs at all. We found that during the 3 years before coming to THI, users' and nonusers' publication rates were fairly similar. By the third year after they began working at THI, however, the users' average publication rate was roughly double that of the nonusers (Figure 2). Admittedly, this was an informal analysis with few subjects, and we cannot discount the possibility of self-selection bias. Furthermore, the users' average publication rate was on the rise even

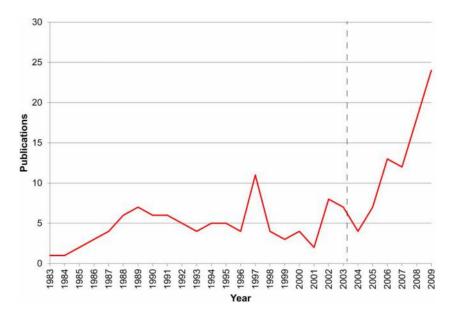


Figure 1: Publication rate of a surgical group that began working with SciPubs in 2003.

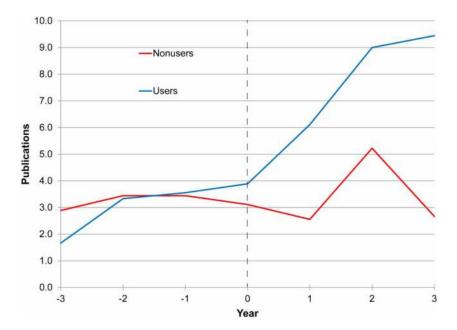


Figure 2: Mean number of publications per year before, during, and after the first year at THI for authors who used SciPubs' services at least once annually (Users; n = 9) and authors who never use them (Nonusers; n = 9). Year 0 refers to the year in which the author started working at THI.

before those authors came to THI and began working with SciPubs' editors, although their publication rate rose faster afterwards.

### The future of SciPubs

No doubt, SciPubs will continue to evolve with THI's needs and with the tools available to do the work. Because we are among THI's heaviest computer users, we are participating in the pilot of a new computer system that may help resolve problems with version control, simplify the tracking of projects, and enable us to communicate with one another more effectively. And we continue to

adapt to the changing requirements of journals and medical conferences.

#### Conclusion

In providing editorial services free of charge to our institution's physicians and scientists, SciPubs enhances academic life at THI. Creating such a service requires that the host institution be willing to invest the necessary resources today to improve its academic productivity in the future. In addition, the effort should be guided by a manager who is able to recognise, recruit, and train persons with editorial talent and skill.

#### **Author information**

**Stephen N. Palmer** is manager of the Section of Scientific Publications at the Texas Heart Institute, where he has worked as a medical writer and editor since 2003. He is also President-elect of the American Medical Writers Association.

Marianne Mallia was manager of the Section of Scientific Publications from its inception in 1989 until 2015. She currently works as a medical editor at the Mayo Clinic in Scottsdale, Arizona, and she is a past President of the American Medical Writers Association.