

EDITOR'S PAGE

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The *Journal of Nuclear Medicine Technology* has entered adulthood. Together we have traveled a good distance over the past 25 years as the practice of nuclear medicine technology has changed and evolved. *JNMT* recorded those steps, just as it does today. The journal also reflects global changes, witnessed by the fact that authors from five countries are represented out of the nine manuscripts presented in this issue.

What does the future hold? One goal of the Technologist Section is to increase the number of issues of *JNMT* from four to six issues a year. To reach this goal, we must increase the number of submitted manuscripts. If every abstract accepted for oral presentation at the SNM Annual Meeting subsequently was submitted to *JNMT* as a written manuscript, we would easily meet this goal. Sadly, fewer than half of the abstracts are ever submitted as manuscripts.

A few years ago one of Tom Peters' "On Excellence" newspaper columns in the business section was titled, "To get going, get going" (Tribune Media Services, Sunday, February 5, 1995). I have this column on the bulletin board in the *JNMT* office and it still motivates me. Some authors start by writing an outline or key ideas. I am partial to drafting the materials and methods section as a first step, since this section documents the procedures that were performed. It doesn't really matter. The important thing is to write something, anything, to get yourself going. This is often the hardest part of the whole process. That is why I like to see those words staring back at me, GET GOING. Once you write any part of the manuscript, you have started and the manuscript is on your agenda.

Writing scientific papers, like other skills, has a learning curve and requires practice and a thick skin in addition to the scientific knowledge. Writing the manuscript becomes easier with experience, although it is nearly always time consuming. Drafts are written and rewritten. Most authors have had their pride hurt early in their writing careers by someone's well-meaning criticism. This is not a fatal condition. There is an attitude evolution that happens along the way. The next experience is having

someone save your reputation by catching an error in a manuscript. At this stage, authors are generally grateful that the error was caught. This leads to wanting reviewers to be as critical as possible. Mature authors have learned that, ultimately, criticism results in a better paper. Review, rewriting, more reviews and revision are all a part of the process.

After the materials and methods section, the results section is a logical second part of the manuscript to write. This is the presentation of your data. Some manuscripts are so lacking in data that it is difficult to publish them. A friend of mine likes to paraphrase a line from the old Mel Brooks movie, *Blazing Saddles*. "Data? We don't need no stinking data." How much data is enough? It depends, but generally more is better. One or two patients make a case report, but not a full paper. Ideally, 30 or more patients make a manuscript. Many papers are initially published with 10 to 20 patients as a work in progress. Over time more data is accumulated and the process is duplicated or refuted at additional institutions.

Case reports have their place in the scientific literature. The role of a case report is to share an unusual or rare finding or to serve as a teaching example. Case reports usually are presented in a page or two. A case report can stimulate additional research. One example comes to mind. Many years ago there were case reports of extra-cardiac ^{201}Tl accumulation visible during routine myocardial imaging. This observation sometimes led to the unexpected identification of a tumor and, over time, ^{201}Tl became a

tumor imaging agent in addition to cardiac applications. The use of $^{99\text{m}}\text{Tc}$ -MIBI as a tumor imaging agent then evolved as a corollary. This example also illustrates the importance of observation in the scientific process. Initially the importance and the meaning of the visible observation of extra-cardiac ^{201}Tl localization was not known.

The discussion section of a manuscript is the author's interpretation of the data and comparison to previously published articles. Use statistical tools properly when appropriate. The discussion should explain the significance of the findings and identify issues or points for further research. The conclusion should be a separate final section to the manuscript.

The introduction can be written at any time in the process. Some authors prefer to write the introduction first and others prefer to write it after they have formulated the conclusions. The introduction states the purpose of the article and should provide the reader with a brief review of subject matter. No data or conclusions are given in the introduction.

The abstract generally is written first for continuing education or teaching editorials because the learning outcomes are defined in the abstract for these types of articles. The content of the manuscript then is directed at these defined objectives. For research manuscripts, the abstract commonly is written last because it summarizes the content of the paper, including the results and conclusions.

The key words are used to create the subject index. The key words should represent the content of the manuscript and be words or phrases that other individuals might use to perform a literature search on the subject. For example, the key words should include: the procedure performed, such as myocardial imaging or quality control; the isotope(s) or radiopharmaceutical(s) used in the study, such as $^{99\text{m}}\text{Tc}$ -MIBI or ^{18}F -FDG; the equipment or process used in the paper, such as instant thin-layer chromatography or a scintillation camera; the disease if appropriate, such as coronary artery disease or thyroid cancer; and other descriptors as appropriate, such as PET or SPECT.

All references must be cited in the text
(continued)

of the manuscript and be numbered in parenthesis in order of appearance. References are not repeated. The source first identified as reference 3 is identified as (3) throughout the manuscript no matter where it is cited later in the text. Refer to the *JNM/JNMT Style Manual for Authors* for complete reference style guidelines. The *Style Manual for Authors* is available on request.

Tables and figures should be submitted on separate pages and not be embedded in the manuscript. Each figure needs a separate figure legend. Figures must be high-quality illustrations submitted as photographic glossies and three original copies are needed of each figure. No hand lettering will be accepted. Each figure must be labeled on the reverse side with the figure number, author's name and a "this side up" arrow indicating the top of the figure to ensure the figure is displayed properly. The *Style Manual for Authors* contains additional specific information related to tables and figures.

Manuscripts must have a cover page that includes the title of the paper and identifies all authors and their affiliations. Short titles are generally better than long titles. One author must be designated as the corresponding author with complete mailing address and telephone number provided. Each manuscript must be double-spaced and be submitted both on a computer disk as well as a paper copy. All copyright releases must be supplied by the author at the time of submission.

We recommend that all manuscripts be submitted six months before publication to allow for review and revisions, if needed. Each manuscript is reviewed by a minimum of two peer content experts and the reference editor. The manuscript review process commonly takes 30 to 60 days, depending on the reviewers. No manuscript is acted upon without a minimum of two peer reviews. Some manuscripts are sent for a third or fourth review if there is a difference of opinion

among the initial reviewers. This all takes time. Manuscripts may be accepted, accepted pending revision, the author(s) may be asked to provide extensive revisions or additional data with a second round of peer review, or the manuscript may not be suitable for publication in *JNMT*. Sometimes a manuscript is more appropriate for other journals and the authors are informed. Authors should complete their revisions quickly. When revisions are returned months later, the entire review process must begin again.

The production of each issue of *JNMT* generally begins three months before the mailing date. By the time you read this, the June scientific manuscripts will be in production and manuscripts for future issues will be under peer review.

We can produce six issues of the *Journal of Nuclear Medicine Technology* a year and fill it with high-quality science. I encourage you all to get going on those manuscripts. Get going today.